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.

AMERICAN ASSOCIATION
FOR
STUDY and PREVENTION
OF
INFANT MORTALITY
NOW
The American Child Hygiene Association

TRANSACTIONS OF THE NINTH ANNUAL
MEETING

CHICAGO, DECEMBER 5-7, 1918

PART I—Proceedings of the Session on Child Welfare

Headquarters of the Association
Medical and Chirurgical Faculty Building
1211 Cathedral Street, Baltimore, Md.

PRESS OF
FRANKLIN PRINTING COMPANY
BALTIMORE
1919

AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY

(NOW THE AMERICAN CHILD HYGIENE ASSOCIATION)

OFFICERS

1917-1918

President, Mrs. Wm. Lowell Putnam, Boston
President-elect (1919), Dr. Philip Van Ingen, New York
Vice-Presidents, Dr. I. A. Abt, Chicago; Dr. W. S. Rankin, Raleigh
Secretary, Dr. Henry F. Helmholz, 800 Davis Street, Evanston, Ill.
Treasurer, Mr. Austin McLanahan, of Alex. Brown & Sons, Baltimore
Executive Secretary, Miss Gertrude B. Knipp
Executive Office, 1211 Cathedral Street, Baltimore, Maryland

Directors

(Grouped according to years in which terms expire)

1918

Dr. William R. Batt, Harrisburg	Mr. Austin McLanahan, Baltimore
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Miss Eliza McKnight, Philadelphia	

1919

Dr. S. Josephine Baker, New York	Dr. Caroline Hedger, Chicago
Mr. George R. Bedinger, Detroit	Dr. Wm. Palmer Lucas, San Francisco
Dr. W. W. Butterworth, New Orleans	Dr. Helen MacMurchy, Toronto
Dr. Charles V. Chapin, Providence	Mr. Harold McCormick, Chicago
Dr. F. S. Churchill, Chicago	Dr. F. W. Schlutz, Minneapolis
Dr. A. B. Emmons, 2nd, Boston	Dr. George M. Tuttle, St. Louis
Miss M. F. Etchberger, Baltimore	Dr. Borden Veeder, St. Louis
Dr. C. E. Ford, New York	Dr. Wm. H. Welch, Baltimore
Dr. C. L. Furbush, Philadelphia	

1920

Miss Minnie H. Ahrens, Chicago	Mrs. Duncan McDuffie, Berkeley
Dr. W. N. Bradley, Philadelphia	Dr. Lenna Meanes, Des Moines
Dr. T. B. Cooley, Detroit	Dr. Helen C. Putnam, Providence
Prof. Irving Fisher, New Haven	Dr. J. Gurney Taylor, Milwaukee
Mrs. Philip B. Fouke, St. Louis	Dr. C. E. Terry, New York
Dr. J. Morton Howell, Dayton	Dr. J. Whitridge Williams, Baltimore
Dr. J. L. Huntington, Boston	Dr. Linsly R. Williams, Albany
Prof. Abby L. Marlatt, Madison	Dr. J. H. Young, Boston
Dr. Thomas C. McCleave, Berkeley	

1921

Dr. Isaac A. Abt, Chicago	Dr. John Howland, Baltimore
Mr. Albert Cross, Philadelphia	Dr. J. N. Hurty, Indianapolis
Dr. Hoyt E. Dearholt, Milwaukee	Mr. Sherman C. Kingsley, Cleveland
Miss Edna Foley, Chicago	Miss Harriet L. Leets, Cleveland
Mr. Homer Folke, New York	Dr. Julius C. Levy, Newark, N. J.
Dr. F. E. Fronczak, Buffalo	Dr. J. W. Schereschewsky, Washington
Dr. Henry F. Helmholz, Chicago	Dr. J. P. Sedgwick, Minneapolis
Dr. Frances Hollingshead, Columbus	Prof. C.-E. A. Winslow, New Haven
Dr. L. Emmett Holt, New York	

1922

Miss Ellen C. Babbitt, Philadelphia	Dr. McGuire Newton, Richmond
Dr. Richard A. Bolt, Cleveland	Dr. Langley Porter, San Francisco
Dr. Alan Brown, Toronto	Dr. W. S. Rankin, Raleigh
Dr. H. J. Gerstenberger, Cleveland	Dr. L. T. Royster, Norfolk
Dr. Clifford Grulee, Chicago	Dr. H. L. K. Shaw, Albany
Dr. S. McC. Hamill, Philadelphia	Dr. Mary Sherwood, Baltimore
Dr. J. H. Mason Knox, Jr., Baltimore	Mrs. Letchworth Smith, Louisville
Miss Julia C. Lathrop, Washington	Dr. Philip Van Ingen, New York
	Dr. Joseph S. Wall, Washington

AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY

COMMITTEES 1917-1918

Executive

Mrs. William Lowell Putnam, Boston	Dr. Langley Porter, San Francisco
Dr. Henry F. Helmholtz, Chicago	Dr. W. S. Rankin, Raleigh
Miss Minnie H. Ahrens, Chicago	Dr. Mary Sherwood, Baltimore
Dr. H. J. Gerstenberger, Cleveland	Dr. Philip Van Ingen, New York
Dr. S. McC. Hamill, Philadelphia	Dr. W. C. Woodward, Boston

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Eugenics

Chairman, Mr. Roswell H. Johnson, Pittsburgh	
Dr. Louis I. Dublin, New York	Dr. Harvey Jordan, Charlottesville
Lt. Paul E. Popenoe, Washington, D. C.	

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Chairman, Miss Estelle L. Wheeler, Washington, D. C.	
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Propaganda

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Chairman, Dr. S. McC. Hamill, Philadelphia

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Chairman, Dr. Dorothy Reed Mendenhall, Washington

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Dr. C. St. Clair Drake, Springfield, Ill.	Dr. Robert M. Woodbury, Washington
Mrs. Etta R. Goodwin, Washington, D. C.	

Educational Leaflet and Booklet

Chairman, Dr. H. J. Gerstenberger, The Babies' Dispensary and Hospital, Cleveland

Traveling Exhibit

Chairman, Dr. Mary Sherwood, The Arundel, Baltimore

Procedure and Record Forms for Prenatal Work

Chairman, Dr. J. Whitridge Williams, Baltimore

Procedure and Record Forms for Postnatal Work

Chairman, Dr. J. H. Mason Knox, Jr., Baltimore

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Miss Julia C. Lathrop, Washington	Dr. Joseph S. Wall, Washington
Dr. McGuire Newton, Richmond	

1923

Dr. Wilmer R. Batt, Harrisburg	Dr. J. E. Huenekens, Minneapolis
Dr. Adelaide Brown, San Francisco	Mr. Austin McLanahan, Baltimore
Dr. Howard Childs Carpenter, Philadelphia	Miss Frances Perkins, New York
Dr. Taliaferro Clark, Washington	Mrs. William Lowell Putnam, Boston
Dr. John S. Fulton, Baltimore	Dr. Herman Schwarz, New York
Dr. Hastings H. Hart, New York	Dr. Richard M. Smith, Boston
Dr. B. Raymond Hoobler, Detroit	Miss Estelle L. Wheeler, Washington
Mrs. James L. Houghteling, Chicago	Dr. Wm. C. Woodward, Boston

Executive Committee

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Dr. Henry F. Helmholz, Chicago	Dr. Langley Porter, San Francisco
Miss Minnie H. Ahrens, Chicago	Mrs. William Lowell Putnam, Boston
Dr. S. McC. Hamill, Philadelphia	Dr. J. F. Sedgwick, Minneapolis
Dr. J. H. Mason Knox, Jr., Baltimore	Dr. Philip Van Ingen, New York

AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY

(NOW THE AMERICAN CHILD HYGIENE ASSOCIATION)

PAID UP MEMBERSHIP

October 1, 1917—September 30, 1918

	Life Members 1910-1917	Advance for 1918	Paid during 1918		Advance for 1919	
			Arrears for 1917	Current	Old Members	New Members
Alabama	1	..	..
Arkansas	1	..	..
California	1	..	24	..	1
Colorado	4	..	1
Connecticut	1	..	23	..	..
Delaware	1	..	..
Dist. of Columbia	2	..	26	..	..
Florida	1	..	..
Georgia	4	..	..
Illinois	51	..	..
Indiana	6	..	..
Iowa	4	..	..
Kansas	4	..	..
Kentucky	10	..	..
Louisiana	12	..	..
Maine	2	..	..
Maryland	5	2	1	71	..	..
Massachusetts	77	2	5
Michigan	1	1	..	35	1	1
Minnesota	33	..	2
Missouri	1	..	..	15	..	..
Montana	1	..	2	..	..
Nebraska	1	..	..
New Hampshire	4	..	..
New Jersey	36	..	..
New York	2	1	1	153	3	2
North Carolina	3	..	..
Ohio	5	1	..	69	..	..
Oklahoma	2	..	..
Oregon	1	..	1	..	..
Pennsylvania	3	..	1	105	1	8
Rhode Island	1	9	..	..
South Carolina	1	..	4	..	..
South Dakota	1	..	..	..
Tennessee	1	..	..
Texas	2	..	2	..	1
Utah	5	..	..
Vermont	2	..	..
Virginia	11	..	..
Washington	3	..	..
West Virginia	3	..	..
Wisconsin	7	..	..	40	..	..
Canada	13	..	..
Chile	1
Hawaii	4	..	..
Panama	1	..	..
Philippine Islands	1	..	..
New Zealand	1	..	1	..	1
Totals	25	24	5	886	7	23
				24		
				25		

935 Total 1918 Membership

REPORT OF THE TREASURER

October 1, 1917—September 30, 1918

Balance on hand October 1, 1917.....\$2,163.31

Receipts

Membership—	Arrears Current Advance				
	1917	1918	1919		
Active	\$15.00	\$2,087.05	\$78.00		
Affiliated		715.00	15.00		
Contributing		760.00	10.00		
Sustaining		400.00	50.00		
Life		400.00			
					\$4,530.05
Contributions—					
General			\$ 93.00		
Toward Transactions			326.00		
Membership Campaign			200.00		619.00
Transactions—Sale of printed copies.					
1910 — 1916			\$ 64.84		
1917			48.96		113.80
Exhibit — Rentals					17.84
Refunds—					
Account Traveling Expenses			\$ 20.00		
Account Postage—Women's Civic League			2.04		22.04
Interest on bank balances					87.91
Sale of leaflets—					
5,350 Motherhood			\$ 40.64		
700 Prenatal Care Record Forms			5.00		
2,700 Educational Leaflets			15.50		61.14
					<u>5,451.78</u>
					\$7,620.09

Disbursements

Salaries					\$3,130.00
Rent of Office					200.00
Printing — general					730.18
Transactions of Richmond meeting:					
Printing 1,750 copies			\$1,082.08		
Distribution—Postage			142.28		
Wrapping			17.11		
Wrappers			27.00		1,268.47
Postage					358.42
Office Supplies					239.40
Clerical Help:					
Official stenographer, 1917 meeting			\$ 110.00		
At Baltimore office			470.65		580.65
Telephone					37.06
Multigraphing and typewriting					89.04
Traveling expenses					120.28
Expressage and telegrams					21.34
Exhibit					33.63
Miscellaneous:					
Expenses at Richmond			\$ 12.58		
Survey			49.70		
Insurance — Transactions			7.22		
Carfare, janitor service, ice, etc.			35.51		104.98
					<u>6,913.45</u>
Balance on hand September 30, 1918.....					\$706.64
General			\$122.25		
Exhibit			384.39		
Membership Campaign Fund ..			200.00		
					<u>\$706.64</u>

Respectfully submitted,

AUSTIN McLANAHAN,
Treasurer.

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IMPORTANT NOTICE

The name of the Association was changed to the **American Child Hygiene Association** at a special meeting held at the Academy of Medicine, New York City, January 18, 1919.

The annual meeting of the Association was to have been held at Asheville, N. C., in November, 1918, but owing to the influenza epidemic it was unavoidably postponed until later. Conditions in connection with the epidemic having improved, the meeting was held in Chicago December 5-7, 1918.

For the convenience of readers, the report of the Conference on Child Welfare, which follows the presidential address, includes in addition to material presented at that session a few papers from other sessions, which dealt with the same subject.

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**NINTH ANNUAL MEETING
of the
AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT
MORTALITY**

The Ninth Annual Meeting of the American Association for Study and Prevention of Infant Mortality was held at the Congress Hotel, Chicago, December 5-7. It was originally planned to hold the meeting concurrently with that of the Southern Medical Association at Asheville, N. C., November 11-14, but the plans had to be changed because of the influenza epidemic. The meeting was held under the presidency of Mrs. William Lowell Putnam, Boston.

SESSIONS

The annual meeting of the Executive Committee and of the Board of Directors took place immediately before the opening session, which was devoted to reports from the affiliated societies. Other meetings of the directors were held at the call of the President. The meeting for organization of the incoming Executive Committee took place on Saturday afternoon, December 7.

The program was arranged with special reference to problems of the reconstruction period and was as follows:

Thursday morning, December 5:

General session. Mrs. William Lowell Putnam presiding. Round Table Conference with affiliated societies.

Thursday afternoon:

Nursing and Social Work. Chairman, Miss Estelle L. Wheeler, R. N., Washington, D. C.

Eugenics. Chairman, Professor Roswell H. Johnson, University of Pittsburgh.

Thursday night:

Problems of War and Reconstruction. Chairman, Dr. S. McC. Hamill, Philadelphia.

Friday morning, December 6:

General session. Chairman, Mrs. William Lowell Putnam, Boston. Annual business meeting. Reports of Committees on uniform definition of stillbirths and uniform reporting of stillbirths; outlines for courses in infant and child care; conservation of the milk supply; procedure and record forms in postnatal work.

Pediatrics: Joint session with the Chicago Pediatric Society, Chairman, Dr. I. A. Abt, Chicago.

Friday afternoon:

Obstetrics. Chairman, Dr. Edward P. Davis, Professor of Obstetrics, Jefferson Medical College, Philadelphia.

Round Table Conference in Co-operation with the National Study of Methods of Americanization (Division of health standards and care). Subject: Health problems of foreign-born women and children. Chairman, Mrs. William Lowell Putnam, Boston.

Friday night:

General session. Address by the President, Mrs. William Lowell Putnam.

Saturday morning, December 7:

General session. Chairman, Mrs. William Lowell Putnam, Boston. Subjects: (a) Child welfare work abroad; (b) Child welfare work in the United States; looking toward the future.

Saturday afternoon:

Rural Communities. Joint session with the American Public Health Association. Chairman, Dr. Dorothy Reed Mendenhall, Washington, D. C.

Closing business meeting: Chairman, Mrs. William Lowell Putnam, Boston.

Committees

The following committees were appointed:

Nominations—

Mr. George R. Bedinger, Detroit, Chairman.

Dr. W. H. Davis, Washington, D. C.

Miss Edna Foley, Chicago.

Dr. Clifford Grulee, Chicago.

Dr. Henry F. Helmholz, Chicago

Resolutions—

Dr. S. McC. Hamill, Philadelphia, Chairman.

Miss Minnie H. Ahrens, Chicago.

Dr. Henry F. Helmholz, Chicago

Review and Publication of Transactions—

Dr. Mary Sherwood, Baltimore, Chairman.

Dr. John S. Fulton, Baltimore.

Mrs. William Lowell Putnam, Boston.

ELECTION OF DIRECTORS

The following Directors whose terms had expired were re-elected for a term of five years:

Dr. Wilmer R. Batt, Harrisburg

Dr. H. C. Carpenter, Philadelphia

Dr. John S. Fulton, Baltimore

Dr. Hastings H. Hart, New York

Dr. Wm. C. Woodward, Boston

Mrs. James L. Houghteling, Chicago

Mr. Austin McLanahan, Baltimore

Mrs. William Lowell Putnam, Boston

Dr. Herman Schwarz, New York

The following new Directors were elected for a term of five years:

Dr. Adelaide Brown, San Francisco

Dr. Taliaferro Clark, Washington

Dr. B. Raymond Hoobler, Detroit

Dr. J. E. Huenekens, Minneapolis

Miss Frances Perkins, New York

Dr. Richard M. Smith, Boston

Dr. George Vincent, New York

Miss Estelle L. Wheeler, Washington

OFFICERS FOR 1919

Being in active service, Dr. Philip Van Ingen, Major M. R. C., President-elect for 1917-1918, was unable to assume the duties of that office. The Board then elected Dr. Van Ingen President-elect for 1919.

The following officers for the term beginning December 7, 1918, were also elected:

President, Dr. S. Josephine Baker, New York.

First Vice-president, Dr. Wm. Palmer Lucas, San Francisco.

Second Vice-President, Dr. W. S. Rankin, Raleigh.

Secretary, Dr. Henry F. Helmholz, Chicago.

Treasurer, Mr. Austin McLanahan, Baltimore.

Executive Secretary, Miss Gertrude B. Knipp, Baltimore.

EXECUTIVE COMMITTEE

Dr. S. Josephine Baker, New York
Dr. Henry F. Helmholz, Chicago
Miss Minnie H. Ahrens, Chicago
Dr. S. McC. Hamill, Philadelphia
Dr. J. H. Mason Knox, Jr., Baltimore
Dr. Julius Levy, Newark
Dr. Langley Porter, San Francisco
Mrs. William Lowell Putnam, Boston
Dr. J. P. Sedgwick, Minneapolis
Dr. Philip Van Ingen, New York

The following amendment was added to the By-Laws:

(Add to Article IV.—Committees:)

A vacancy which occurs in the Executive Committee during intervals between the annual meetings, may be filled for the unexpired term by appointment by the President, subject to approval by the Executive Committee.

Change of Name Proposed

The desirability of changing the name of the Association and of increasing the scope of its activities was discussed and it was proposed that Article 1 of the Constitution be changed to read: The name of this Society shall be the American Child Hygiene Association.*

Committee on Organization and Working Program.

In connection with the proposed change of name, the following Committee was appointed to consider the future development of the Association and to recommend suitable extension plans:†

Dr. S. McC. Hamill, Philadelphia, Chairman
Dr. S. Josephine Baker, New York
Dr. Clifford Grulee, Chicago
Dr. Henry F. Helmholz, Chicago
Dr. J. H. Mason Knox, Jr., Baltimore
Dr. Julius Levy, Newark
Dr. J. P. Sedgwick, Minneapolis

RESOLUTIONS

The following resolutions were reported favorably by the Committee and were unanimously adopted by the Association:

Resolved: That this Association hereby petition the Federal Children's Bureau, or in the event of their refusal any other agency having funds for social investigation to institute an investigation looking to the development and standardization of methods by which our knowledge of heredity may be utilized for the purpose of determining cases of disputed parentage, in view of the great value such results would have in making it possible to obtain a better support for illegitimate children by the fathers, and to protect innocent persons from slanderous charges and by these two means to lead to a reduction in the number of illegitimate children and also a reduction in their mortality.

*Favorable action on the proposed amendment was taken at a special meeting of the Association held at the New York Academy of Medicine Saturday morning, January 8, 1919. The name was accordingly changed to the American Child Hygiene Association.

†The Committee was enlarged later. Its personnel at present is:

Dr. Howard C. Carpenter, Philadelphia, Chairman.	Dr. James Lincoln Huntington, Boston
Dr. S. Josephine Baker, New York	Dr. J. H. Mason Knox, Jr., Baltimore
Dr. Clifford Grulee, Chicago	Dr. Julius Levy, Newark
Dr. S. McC. Hamill, Philadelphia	Mrs. William Lowell Putnam, Boston
Dr. Henry F. Helmholz, Chicago	Dr. J. P. Sedgwick, Minneapolis

Resolved: That the Federal Children's Bureau be hereby petitioned by this Association at the suggestion of its Eugenics Section, to institute an investigation into the viability and other characteristics of the children of women over 42 as affected by the age of the mother.

Resolved: That the thanks of this Association are due and are hereby expressed to the chairmen, speakers and all who have taken part in the meeting; to Dr. Helmholtz, Chairman, and to the other members of the Local Committee; to the officers, managers and staff of the Chicago Infant Welfare Society for carrying through and completing the arrangements for the meeting—and for the pleasant hospitality and many courtesies extended to the members of the Association and to others in attendance at the meeting.

The incoming president, Dr. S. Josephine Baker, was introduced to the Association at the General Session on Saturday afternoon.

Nineteen states, the District of Columbia and Canada were represented at the meeting.

PRESIDENT'S ADDRESS

MRS. WILLIAM LOWELL PUTNAM, Boston

When this meeting was planned the great war was raging with no immediate prospect of cessation. We expected a war meeting. Our program had in mind the problems which had been confronting our allies for four bitter years, and we were studying the way they had met them, or had been unable to meet them, with a view to adapting their successes to our needs and of learning by their failures. The problems were hard, but we had the example of our allies to help us, and we had a country united as never before, because it was united in a stupendous task which, without union, would have been impossible.

Our time of meeting has come, and behold, in the twinkling of an eye, our problems have changed, and far from being made easier they are infinitely harder—for no allies have preceded us down this difficult road and are standing ready, holding out to us a helping hand. The problems facing us now have never been met before, for all things are made new.

After the great cataclysm through which the whole world has passed and in which we in America have had a share of short duration, things cannot be the same that they were five years ago. They must be made new. But new things are not necessarily better than the old. On the contrary—the very fact that conditions have long endured, is in itself an indication that there was something desirable in the conditions; there may also have been much that was bad, but let us take care that in parting from the old we carry with us into the new those things which are of good report—those things which have been tried and found worthy of use.

National Unity

Some of the problems which bear upon the matter which we have set ourselves peculiarly to study are confronting the whole country. The making of our enormous body of citizens of foreign birth into understanding Americans is a task which requires the best minds in the country for its solution. There is a tendency—a strong tendency—toward the uniting into racial groups of the various stocks from which we in this country have sprung. In so far as this keeps alive the best traditions of the past it is admirable, for, this new world to be

enduring, must be built upon the foundations of the old. But if these groups tend toward the separating of one part of our citizens from the whole—if they consider themselves as Lithuanian-Americans, Italian-Americans, and so forth, then the groups constitute a menace to the nation. These groups of people, to become one with all others, must have a common language, must learn and use (for to use is almost more important than to know) the language of the country—not the language used in certain sections of the country, but the English language, which is as much American as English today. The effort of the builders of the tower of Babel to reach up to Heaven was confounded by their inability to understand each other. We shall fail in the same way of reaching the heaven which this country has before its vision unless we take heed in time. Again, we love best that to which we have given most, and our newer citizens will be the better Americans when they consider what they can bring from the old home to the country of their adoption, rather than only what the new land has to give them. That which has accomplished more for the unity of America than anything which has ever happened to her is the great war. We have given everything together, we have given ourselves even unto death, and we have given that which was dearer to us than life, for we have given those without whom it is hard to find life worth the living. Those of us who have had no sons to give have given of the best we had, our wealth has been poured out as never before, we have learned what it is to give without measure, each for the good of the whole. There has been such a sense of togetherness in it all. Distinctions of wealth and of education have been forgotten. The place of a man's birth has made no difference so he were loyal now. We have been one nation.

But now that peace is nearly here there is great danger of disintegration, of going back to the old ways, since the great emotion which bound us together is no longer called into play. The selfishness of each part of the body politic will come out again. Capital and labor will have the same misunderstandings as in the past, forgetting that the good of each depends on the good of the other. And yet there cannot be the same misunderstandings because the war has taught our young men so many things. They have learnt mutual understanding because they have acquired mutual respect, and in many cases mutual affection, and this they will bring home with them, and it will help to

make a new earth. This understanding of the young men is the most inspiring thing in our outlook on the future. We must see to it that we who have stayed at home gain the reflexion of this spirit. We must do our work each for the good of all, and in no other work is it so easy as in our chosen task.

The draft has shown us the deficiencies of our care of the children of a generation ago. The weighing plan of the Children's Bureau is doing pioneer educational work in awakening the mothers of the present generation to the needs of the generation just starting on the road. This need exists all through society. General education, unfortunately, does not yet convey knowledge in woman's special work—the care of the family and of their home—and this knowledge must be supplied if we are to do our part to better the world. Much of the unity of the women of all classes who have been working together in this war has been brought about by the universal sense of motherhood which women have felt. Those whose sons and husbands were in danger together could not fail to feel it, but it has been in the heart also of the most confirmed old maid. You remember the story of the woman who was standing behind the counter in her little shop when a boy ran in shouting, "Ma'am, your little boy's been run over down the street." She ran out of the door, forgetting even to put on her coat, and got half way down the block before she stopped, exclaiming, "What a fool I am. I ain't even married!" All women have this motherliness within them. Let us not lose the togetherness of it when the war is over. Our girls of all sorts of training and social position have been working together for the soldiers. In the hospitals and the canteens—in the Red Cross workrooms they have worked side by side—they must not stop now. In parts of England, notably in Oxford, the better trained women have long been in the habit of dividing the city between them and of visiting regularly, under the Health Officer of the city, the new-born babies and their mothers, taking them what was needed, and truly befriending them, sick or well, throughout the infancy of the little child. Why should not our girls take over now a great part of the work of the Baby Hygiene nurses where healthy babies are concerned? A very little training would teach them all they need to know to do this work—(they generally care for their own babies without any!)—for behind them always would be the trained nurse to call in if need arose. These

visits would tend enormously toward togetherness, and they would moreover relieve many nurses for work which a nurse alone can do, and which has often had to go undone because there were not nurses enough to do it.

The problem of Americanization is probably the most important one before the country today, and we of this Association have a great duty to perform toward its solution, for every woman can be reached through her love for her children and her desire for their good. In East Boston the Italian Associated Charities worker amongst her own people, has found that the prenatal care which the women have received through the Clinic there has been a great Americanizing influence.

Fathers

And it is not only the mothers who can be reached through their love for their children but the fathers as well. One of the very serious mistakes we make—which would be humorous were it not so pathetic—is that of assuming that fathers care little or nothing for their children. The love of a father has been the symbol in all literature for that which is most divine, most full of tender compassion and loving kindness. Whence has come this modern notion that the father cares for nothing but himself? There is no surer way to make it true than to assert it often enough. The young father, bursting with pride in his offspring, finds himself brushed aside, relegated to the ranks of the incapables, unless, indeed, he happens to be the only person to care for his wife and little baby, and even then he knows himself to be but a makeshift for the woman whom his wife would have to care for her baby if he could afford one. Most of us do after a fashion what is expected of us, and if nothing is expected we do nothing. Let us take as one thing to be striven for during the coming year—the resurrection of fatherhood. Our foreign-born will help us here, for with them the man is looked upon as indeed the head of the house and what he says is done. These fathers need, perhaps, less urging to their duty than many of our American-born men, but both need teaching—with the mothers—of what their babies need. And with the teaching of the fathers the mother's task will become far easier of accomplishment.

Control of Immigration Vital

The question of Americanization involves that of immigration. We must not forget in the possible good of the individual the danger

to the community of taking into the country more immigrants than can be assimilated and Americanized. Indeed, we have no right to jeopardize the nation even if it be for the good of the few—a good, which, moreover, is quite questionable. Here two forces are at work, both of which are highly dangerous. One is the capitalist who desires new immigrants in quantity because they will work for lower wages than will the native-born—who desires them, therefore, that he may exploit their labor—and the other and far more insidious danger is the kind of social worker who sees life only from one angle and therefore encourages unrestricted immigration because he thinks that the individual immigrant is better off in this country than in the one from which he comes. This kind of social worker, although he is undoubtedly not in the majority amongst those of that noble profession, is still far too common. He looks at the whole of life in terms of the bottom until he forgets that the bottom is, after all, from the truly social point of view, only a place to rise from, not one to be kept full at all costs. The bird's eye view of life may be oblivious of details perhaps, but it is better than the worm-eyed view which sees nothing at all but the dregs. This brings us to the observation often ignored, but none the less true, that the social worker can be nothing but a slum worker unless he or she gets away from the slums often enough and completely enough to have a point of view truly social. Only Baron Münchhausen could lift himself up by his boot straps—real people need to have the straps above them—by which they lift themselves to higher things. The importance of keeping our viewpoint high can hardly be exaggerated. The hardships and sufferings of the lowest stratum of society are so great that they are not likely today to go unrecognized. Their needs must most certainly be cared for—but the most effective help that can be given them in the long run is to keep their numbers down; for one great trouble with them is that their ranks are so crowded. Permitting the entrance of large numbers of immigrants crowds them still more and has, moreover, a tendency to increase throughout the world the numbers of those who are the least fit to cope with life. In our desire to help the world we must beware lest our near-sightedness interfere with the far-seeing plans of a supreme beneficence.

Nursing for Those of Moderate Means

“The gods help them that help themselves!” Let us take for another special object for the year ahead of us the effort to help the

gods in so doing. The great class of those who help themselves is surely most worthy to be helped, and yet they are the ones usually neglected because those who cannot help themselves have absorbed so much of our attention. There is attention and interest enough to meet both needs if it is wisely directed. The poor need not suffer because we are trying to keep others above the low water mark. One of the most frequent causes of the fall of the self-respecting into the ranks of the incapables is sickness. These people have been unwilling to accept charitable medical care—nor should they accept it—and yet how few dispensaries and hospitals offer them the best care at a price within their means—in these it is apt to be either charity, or accommodations which only the rich can afford. But it is in nursing rather than in medical care that the people of moderate means suffer most. The expense of a trained nurse rapidly uses up carefully accumulated savings, and if it be the bread-winner who is ill there is nothing to replenish the diminishing stock. In case the patient is the mother of the family there is no one to do the housework and more expense is involved in getting in somebody for that purpose, for the trained nurse—although in her devotion she may do more—is not expected to do any work beyond the actual nursing of her patient, and only in case of necessity does she even prepare the patient's food. It requires but little thought to see how impossible it is for a family whose earnings are not far above their normal expenses to keep from being submerged when sickness comes to them, and yet these people make up the bulk of the community—they are not to be treated by charity, but they must be helped in order to be able to help themselves. The present situation is largely due to the complexity of modern life, especially in cities, which has killed out the old neighborly spirit. When people know that their neighbors are suffering they cannot let them suffer, but at present one's next door neighbors might as well live in another town for all that is usually known of them, and so the old motherly women who were always sent for when need arose among their neighbors no longer exist.

A plan to furnish the kind of help needed in sickness by people of moderate means was devised by Mr. Richards M. Bradley in Brattleboro, Vermont, and was started in Boston with his help and guidance. The plan has been so successful in operation that I believe it is suitable to mention it here as a means of meeting what is really a very serious

situation, at present almost entirely unmet, and which showed, during the recent epidemic of influenza, what a terrible menace it is to society. The plan is as follows and is very simple.

Attendants, trained when possible, take the actual care of the patients under the supervision of a trained nurse—the trained nurse herself visiting the case as often as may be necessary to see that the attendant is satisfactory in her work and that she is the right person for the place, for, in some cases, the personal relation between patient and attendant may make just the difference in the patient's recovery. After an operation, or in any case where there may be a careful dressing to be made, the nurse does that herself, leaving the attendant to do only the simpler kind of nursing. The attendant does all of the housework if the patient is the mother herself, and in any case helps in the household in every way she can. These attendants are furnished for from \$15.00 to \$21.00 a week, including the supervision. It is very difficult, however, to find suitable attendants and it is so desirable to have them trained that the Household Nursing Association is now carrying on a training school for them with the help of the Boston City Hospital, the Huntington Cancer Hospital and others, whereby they are given a training of four months' intensive work in the hospital, doing bedside nursing and at the same time receiving a certain amount of theoretical teaching, followed by two months in the Association's house studying housekeeping in its different branches and doing some field work before they receive their diploma at the end of the six months' course. This training school can be developed indefinitely to graduate large numbers of pupils.

The need is very great, as is shown by the fact that with but little advertising, and without having had trained attendants on whom to call the volume of work has increased seven hundred per cent (700%). These attendants, although primarily intended to meet the needs of those of moderate means could be equally satisfactorily employed in public health work under the supervision of trained nurses, and thus increase the usefulness of the nurses enormously. The need for them was shown, as has been said, during the recent epidemic, when utterly inexperienced volunteers came forward and did all they could to help, to their everlasting credit be it said, because the nursing system was inadequate to meet the calls upon it. This is not intended as disparaging the nursing profession—very far from

it, for I regard the nursing profession as one of the noblest in the world—indeed, if enough nurses had existed to meet the emergency adequately under the present system it could have been only because the profession was greatly overstocked. The fact of the employment of vast numbers of nurses with the army only served to accentuate, it did not cause the emergency—it is the system which is at fault. We are trying to meet a great and varied need with only the highest type of workman. It is as if lawyers insisted on doing all the work of their offices through members of the Bar—refusing to employ stenographers or office boys—or as if doctors would have only other doctors to assist in their offices in lieu of trained nurses. The trained nurse has more difficult duties to fulfill than those in which she is now often employed. Chronic cases seldom require her care, though they may often need her supervision of the caretaker. The care of childbirth in normal cases, after the mother is delivered and the baby given its first bath, could equally well be given by an attendant with occasional visits by the trained nurse, and even in outpatient work where visits are made with no resident caretaker, the attendant could soon be trusted to make most of them. This plan, with that spoken of earlier, of doing most of the healthy baby visiting by means of somewhat trained volunteers, would release many trained nurses for places where they are enormously needed.

Rural Nursing

The needs of rural communities have been terribly neglected because it seemed so hopeless to try to meet them, but we have learnt a great many things lately, and one is that anything can be done if there is enough of the right kind of will to do it. Think of what it would mean to the country mother if she knew that there was a nurse whom she could get hold of in case of need. There is little chance of abuse of this privilege, for the country mother is an independent creature, but we know enough of the needless loss of life in the country, especially amongst those whose welfare peculiarly concerns this Association—the women in childbirth and the little children—to feel that we must do our utmost to provide for all rural communities the blessing of a trained nurse. Even here the services of one or two trained attendants to work under the nurse's direction would enable her to accomplish a vast amount more good than could be the case were she single-

handed, and might perhaps make possible the carrying on of a small hospital which without their help would be impossible. During the coming year nursing service for rural communities should be made possible everywhere. One great advantage to be derived from the rural trained nurse could be prenatal care for the expectant mother—not, alas, visits of the standard frequency, but, still, far better than none. We know from the investigations of the Children's Bureau how much higher is the infant death rate during the first month of life in the rural parts of this country than in the cities. Deaths during the first month are due in large measure to prenatal causes and to accidents of birth, which in their turn could be often obviated if the doctor had knowledge of the condition of both mother and child before the onset of labour. The 15,000 annual deaths in the United States of women in childbirth, brought to our attention by Dr. Meigs, are an even stronger argument for the rural nurse to help and supplement the rural doctor. To the doctors in the country districts the greatest credit is due that matters are not far worse than they are, for they have fought single-handed a very hard fight. Ian Maclaren's story, although he calls it "A Doctor of the Old School," is not outgrown yet, and I trust it may never be, but someone on whom they could call for help would be to these men as well as to their patients of inestimable service.

Training Women for Their Job

We have already spoken of the help which the somewhat trained volunteer might be in the nursing problem by visiting the mothers of healthy babies and helping to keep them healthy. This visiting and the preceding training would be of inestimable benefit also to the volunteers themselves. Into few businesses in life are people expected to enter with such a complete lack of training as that of motherhood—perhaps the most complicated business that exists. Men have evolved colleges and elaborated them into universities to give themselves the training which they need for their various forms of work, and women in entering the learned professions have very properly taken this education to fit themselves for their practice. Nurses are given a very careful and prolonged training—somewhat unduly prolonged for the benefit of the hospitals, perhaps, but, on the whole, an excellent training, fitted to its purpose. But when it comes to motherhood what training have we—we on whom the whole future depends of those lives which

come into being through us? Nothing at all! We do not even give our girls training for the common calling of home-maker, which happily falls to the lot of most women—for really a woman has to make a home wherever she is, and I have an idea that only a woman can make it. But what a sorry thing she does make of it sometimes! And through how much suffering she learns to do it right! Suffering and death perhaps of those she holds most dear, and all through her ignorance! How many first-born babies die, not because they are more delicate than other babies, but because their mothers did not know how to keep them well—what the signs of illness are—when to send for a doctor, and what to do before he comes. Oh! the pity of it. The poor woman for whom life is never the same again! The loss of our little child does bring Heaven very near to us—the gates open and they never wholly shut again—but the care-free buoyancy of life is gone, and we come through our suffering wiser but sadder for all time. It isn't quite fair to the other children either, for a woman who realizes how easily things go wrong finds it very hard to bring up her children quite so hardily as though she had never met death in her path. We must not only have courses of training in home-making in our colleges and schools of higher learning, they should be given in the higher grades of the grammar schools to those girls who are not able to get a further education, so that homes could be made pleasant places of rest and recreation. An immeasurable amount of the drinking in the world comes because men can get nothing decent to eat at home. Love will carry one through a certain amount of bad cookery, but when a man's appetite goes unsatisfied after a hard day's work, over and over again, and his stomach registers repeated protests at what is put into it, I for one do not blame him if he goes where his bodily needs are satisfied. For we are animals with the needs of animals, and these must be met in some fashion (and with the less attention the better) before we can rise to our highest selves. A man can be a martyr truly and rise over bodily ills through the triumph of his soul, but he can't keep at martyr pitch all the time, especially when he knows it is all unnecessary. Other women can cook, why can't his wife? Why, indeed! Because our system of educating women has large gaps in it. I am not advocating doing away with the higher education of women—far from it—I believe in all the education we can get. I want not less but more of it, but if we must omit something to make

room for home-making, I would cut out some of the things that are more remote from the children's daily life. I do not believe, however, that anything essential need be omitted, there is much more time in the world than most of us use, and if we look about I think some could be found to put into these desirable courses of study. I wish that during the coming year we might take up and push to a satisfactory conclusion this matter of the teaching of girls of all grades of education the principles of home-making. They should learn the principles as well as the practice of cooking—the latter is the more important—and marketing should be included in this, with all that it means of economy in proper providing—washing and simple ironing—sewing and cutting out simple garments—the elements of sanitation—and last but not least the care of themselves, which should work either backward to the care of the baby or forward from the baby to themselves.

Teaching the Laws of Life

Another cause of much suffering and death, especially among mothers and babies, is ignorance of the laws of life. Most of us were brought up either ignorant, or, what is worse, we knew things wrong. The manner of giving this information rightly is a difficult thing to decide. Undoubtedly the mother is the ideal person to give it, if she is herself the right kind of person, and it had better be a matter wholly between her and the individual child and not talked over with all the children in the family together. The reason for this is natural enough. No matter how altogether intimate a group of people may be, each one with all, never can the talk between them as a group be quite so close, quite so perfect as between two of them alone together. In the matter of the sexes the talk between mother and child must have the finest flower of intimacy, hence it must be between two alone. Many people who advocate this talk between mother and child say that the time to begin is when the child first asks his mother questions as to how he came here—the birds hatching from the egg, and so forth. It is then too late. The very fact that the child asks questions indicates that his mind has been working upon the matter. Long before a child is old enough to ask questions he has gone far toward acquiring the habit of thinking things over by himself, else he would never arrive at the state of mind when he could ask an intelligent ques-

tion. A child must do a great deal of thinking before he ever speaks a word. It must in many cases be rather fine reasoning in fact. If we wait, therefore, for a child to ask questions about the origin of life we have left him to draw a good many deductions from what he has seen, which deductions are probably wrong and may be a handicap to him and prevent his understanding what we have to tell him in the right way. Therefore, the time to begin to tell a child the laws of life is, I believe, as soon as he can understand language. He will not grasp the whole meaning of what you say, he may even forget it—no matter, you have planted the idea right side up, and the next time you speak of it, even if you have to say all over again what you said before, the idea will grow a little more firmly rooted, and the child will have his association with the deepest things of life inextricably associated with his mother, for the associations which live with us longest are those which go back and back behind our very consciousness. This association is even more important between a mother and her sons than between a mother and her daughters, for the matter of sex—a matter which, however much we think we can ignore it, affects everything in life—works hereto the greater advantage of her sons, and will, I believe, keep them straight as nothing else will—for a normal man has a peculiar feeling of respect as well as of affection for his mother, and the association with her of all matters of sex gives them in his mind the sacredness which should be theirs and robs vice of its charm. What would not this teaching and its intimacy mean in the trying period of adolescence, with its strange new feelings and thoughts, its inconsequence, its egotism, its longing for something—we do not know what—that time of the opening out of life to the full flower of manhood and womanhood, which, if rightly understood, can unfold to hitherto undreamed of beauty, yet with its terrible dangers for the ignorant and unguarded. Adolescence is a time to which we have not given the thought which we should give, for on their passage through this time of peril and of possibility may depend the whole future not only of the individuals themselves, but of those others who may hereafter owe their lives to them.

If the mother cannot give this teaching to the child it must be given in the next best way, and what that way is can only be decided by the circumstances which govern the particular case. These are so varied as to prevent the laying down of hard and fast rules with

few exceptions, and these exceptions are that all teaching of this sort, certainly in youth, should be as individual as possible, and should be given to the sexes separately. This knowledge of life would do an immeasurable amount toward the prevention not only of infant mortality, but of the lifelong results of hereditary syphilis and of the suffering of gonorrhea—certainly the implanting of this knowledge is not far removed from the duty of this Association.

Birth Control

The teaching by the mother, or by others where she is incapable, of the laws of sex and of their application would do away with much of the interest in the insidious propaganda of license called "birth control." This consists in saying to people, "Do what you like and as much of it as you like and I'll show you how to get away with it." It is undermining to the moral nature of men and women. I do not want to be understood to mean that there are no conditions under which the control of conception in ways other than by total abstinence is justifiable, but that the irresponsible manner of their preaching by the advocates of "birth control" is dangerous to the community. I heard one of its foremost advocates in my state seriously tell a group of women that by the practice of methods advocated by her cult marriage was a safe state to be entered into by those with physical defects of such nature that children born to them could not be healthy. A question put to her by one who knew a little more than the others forced from her the confession that all of her methods of prevention might sometimes fail, but it did not, presumably, interfere with her continuing to make the statement to other women, because the statement had always been made with full knowledge of its falsity. Those whom these advocates of "birth control" particularly desire to protect are the poor women with large families, but it is more than doubtful if these people could be made to understand any such propaganda, or to practise it if understood, or that it would be desirable if they did so; whereas the more intelligent among the unmarried as well as the married quite fully understand and are led into license which is not so vastly less objectionable because it wears the cloak of propriety. The self-control which has been practised by decent people since human beings became human has been declared in an epoch-making pronouncement by the Public Health Service to be entirely compatible with

health. The fact that it is difficult to practise gives no more justification to the advocates of license than would be given to one who advised a woman that she was quite right in shoplifting a pearl necklace because it was so difficult for her to get one in any other way. The pearl necklace was not necessary to her welfare, and neither are many other things, although we may want them very much indeed.

Conclusion

I have suggested that for the coming year we take up the "Resurrection of Fatherhood" and the "Training of Girls and Young Women in the Duties of Home-making" with all that it means. There are three other things to which I should like to suggest that great effort be given. The first is the increase of prenatal care until it becomes as usual as care at childbirth. The second is that the greatest possible stress be laid upon breast-feeding. The former has among its other merits the promotion of the latter. Every baby whose mother has been cared for by the Prenatal and Obstetrical Clinic of the Women's Municipal League of Boston during the past year has been breast-fed. There is certainly no more reasonable place to begin our care of babies than at the beginning. It often saves trying to undo things that have been done wrong and that, moreover, often cannot be undone, which is the saddest part of it all. Prenatal Care is sometimes spoken of as if its object were to teach the mother how she must prepare herself mentally for the coming baby and what she must get ready for his bodily needs. It does these truly, but medical care is implied in it quite as much as maternal education, and the mother to whom proper prenatal care has once been given should be much better fitted to bear her second baby than her first, for she should herself know the danger signs and so call in medical help in time. I am sure that universal prenatal care would reduce greatly that blot on civilization—the enormous loss of life both before and at birth. The milk of its own mother should be the birthright of every child, unless indeed in exceptional cases of illness, and experience has proved that it is usually possible to procure it, with patience, even in cases where through some misfortune the milk seems to have gone. Dr. Truby King, in New Zealand, has had great success in bringing back the milk to mothers who had thought it permanently lost.

A fifth thing, and the last, which I could wish that this Association might lay great stress upon this year, has been spoken of earlier—

it is the provision of the best medical and nursing care for a price within the means of the wage-earner and the man of small salary. It can be done if the will to do it be strong enough. In the Boston clinic which I have mentioned, prenatal and obstetrical care by the most completely trained obstetricians and nurses is being provided throughout pregnancy, the birth of the child and the puerperium, for the price of \$25.00, and I believe that the clinic, when it has been a little longer established so that it is functioning one hundred per cent, will be entirely self-supporting for this price per case. This principle can be carried out in clinics for all sorts of disorders equally well.

The year before us is the most critical which we have ever faced. The world is not the same that it was when we went on our way before—the opportunities are greater than we have ever known, and we must measure up to the full stature which should be ours. To me the way is dark before, I cannot see the distant road. Great things are waiting to be done, things which will sway the future not only of this land but of all others. But these five simple things I see, and however great the objects for which we strive I believe that these must be the stepping stones upon our way.

CONFERENCE ON CHILD WELFARE

I. The Work of the Children's Bureau of the American Red Cross in France.

Mrs. Putnam Presiding

Chairman: It is indeed a great pleasure to introduce as the first speaker of the morning the wife of the director of the Children's Bureau of the American Red Cross in France. The subject for our morning's discussion is child welfare work in this country for the future. It seems to me, the best way we can possibly begin is by learning what has been so ably done in France.

Mrs. William Palmer Lucas, San Francisco: It has indeed seemed to me superfluous for me to be called upon to speak of the work for the children in France when you have Dr. Knox, Dr. Sedgwick and Dr. Grulee—men who have actually done the work—here with you at this conference. But as I listened to Dr. Grulee yesterday, as he told of the interesting baby exhibit given at Lyons, it came to me what part mine might be in this conference. Not being a doctor, or a nurse, or a nurse's aide, but simply an interested observer of the work in France, as I listened to Dr. Grulee, I saw my woman's chance. He told you what the Lyons baby show was. He told you how it was done, but he never mentioned the tremendous difficulties of putting on a baby show in France. And I made up my mind that these men and women who have done the work for the children of France will probably never speak of their difficulties in doing that work. Therefore I want to talk to you for just a few minutes about some of the obstacles the Children's Bureau staff had to overcome in the splendid program that was carried on by them.

The Lyons Baby Show! No one but a person of Dr. Grulee's power and force and "go," as you all know him, could ever have succeeded in getting that show open. It is difficult here in our own country, where it is so safe and so protected, and where we have not suffered from the war as they have in France, to visualize how paralyzed France was, and how difficult it was to get action started along any of the civilian lines, to get any supplies moved around, and the effort of putting on such an exhibit as Dr. Grulee described was perfectly tremendous.

The work for the children of France had as its basic idea, co-operation with the French—the use of every existing French agency to carry on the fight to save the French children. It was not possible

physically for America to "doctor and nurse" the French civilian problem. We could only help by acting through the French organizations.

The attitude was that of an old, proud nation that was suffering acutely in a terrible war, toward a young, vigorous nation just entering the conflict with the biggest budget, the biggest army, the biggest this and that. France wanted our help, needed us, but she feared us not a little. It was quite natural. We are not a quiet or contained nation. We make a great deal of noise about our accomplishments, and that noise had been heard in Europe—and one felt that France had stiffened in this resolve, not to allow her need, terrible as it was, to force her into an *Americanization* of her home problems. She was giving too much on that Western front to protect her from Germanization to permit American aid to go too far.

The children's work began, therefore, with the real friendship with the French physicians—five or six men in Paris, children's specialists all—who had worked for the children of France. These men, Marfan, Letulle, Guinon, Triboulet, Mery, LeSage, are all men over sixty years of age. They were doing again the heavy hospital work they had long ago given over to their assistants. Their assistants had gone, all of them, and these men were carrying, single-handed, the entire staff service of great hospitals of four or five hundred beds, besides all the practice outside that could be crowded into their twenty-four hour day. It was a thrilling group to meet—they were soldiers of France, truly; they knew what was needed for the children of their beloved country. They knew how to do it, but they lacked the funds and, for the time being, the personnel to carry out the work. They were charmingly polite to the American doctor and the American offer of help, and they were very tired, so tired that they might have allowed us to do almost anything, you would have thought. But no. We learned that tired as they were, they were still vigilant. The American Red Cross Children's Bureau saw that, and it was the guiding star in all the work. "You are tired out—you have carried a terrible burden alone, how can we help you to go on with the work, to enlarge the work to more adequately meet the situation as you see it—what do you want us to do?" It took time to make that convincing. We must have seemed very fresh and strong and well-fed

to those dauntless people, and we hustled about with efficiency sticking out all over us.

But our men and women won their confidence. They made them believe that they meant what they said. They had not come to preach to them, nor to reform their methods, nor to teach them how. The men and women of the Children's Bureau knew well what American medical men owed to France in the protection of child life. The first children's clinic was in Paris—the first milk station was in Paris. The French knew what they wanted because they had created some of the ideas thought to be so thoroughly American. So that group of Paris physicians came to be almost the advisory board for our bureau, and wherever our physicians went in France they always asked the doctor what he wanted them to do.

It was the same with the government. They had to be won, too—not on the surface—their need was great—but in the carrying out of the plans; that was where the real American purpose was tested. When Evian became the great, throbbing tragedy of France, that place of a hundred sorrows, where the thousands of weary, sick, homeless people first touched once more the free soil of France—the Children's Bureau made the government feel that they were there to *help* in the French way.

It took time, and what seemed like endless conferences in Evian, before the work was really started. It took time for us to be convincing, but they needed a contagious hospital for children, and the big two-hundred bed contagious hospital for children which the Red Cross established there at their request, became truly one of their hands. We staffed it with nurses and doctors and paid the bills, but it was run entirely in co-operation with them—it fitted into their whole great scheme of aid which they had worked out so magnificently—and their *medecin-chef* for Repatries, Dr. Armand Delille, made his rounds at our hospital and was really our chief of staff. It was not always easy for either side; difference in methods, customs and training often made rough places on the road. But in the *great essential* things there was perfect agreement. We had come to help them save their children the way they felt was best, and nothing was too good for the children of the men who said "They shall not pass."

The Children's Bureau preached co-operation with the French, and the only way to prove the truth of the doctrine was to *co-operate*. Evian was a tangible evidence of the real spirit of the work, and it made the way easy with both government and the doctors.

All our work in the war zone had to be carried on with the idea of co-operation first in the minds of the workers. I suppose one of the most difficult situations the Bureau had to meet in its work in France was the work undertaken by Dr. Sedgwick in the so-called "war zone." It meant so much patience in getting to understand and to know the French authorities. It meant so many difficulties that the average American audience does not think of at all. The problem of fitting an American staff and hospital into a French community that was under fire, for the benefit of the civilians, was a very difficult thing to do. The splendid way in which that work was done has now become a matter of history in the work of the Bureau.

The children's work was, in a way, the easiest and the hardest. People, the world over, will endure anything if only the children are helped, and yet to help a strange people care for their own children needed divine tact—and no doubt many difficult places were created by some careless or uncomprehending worker who was going to do things the way they were done in his home town, regardless of whether that meant anything or could mean anything to the French.

The success of the work done for the children of France can only be measured by the *French* attitude toward it—not by the American; the work the Red Cross financed, the emergency needs were met by hospital, clinics, refugee homes for the children and women, and the work was done upon a scale that was French. Another reason for their natural caution about the American Red Cross was its size. They knew with the coming of peace they would face heavy debts as a people, and they dreaded seeing us spend money in their midst that would unconsciously create standards they knew as a people they could not meet for a long time, so that absolute simplicity marked the establishment of any work for children.

The Bureau used what was there, adapted it as best they could to the needs, and really taught a deeper lesson by showing what splendid work could be done with the simplest equipment. Perhaps the most lasting work the American Red Cross has done for the children

of France has been in the stimulating and helping to develop the district nursing work as we know it in America. That was the one new contribution to the French situation—the trained public health nurse who would go into the homes and help the mothers to care for the children.

The French were very quick to see the far-reaching educational value of such work, and they were eager that their French women might be trained to help in the great problem of saving their children. The American Red Cross Children's Bureau was so wise in making French organizations the training centers for these courses. French doctors are giving the lectures and the American public health nurses are giving the practical work to the French students in French hospitals and clinics. But the detail of these courses for public health visitors I am sure Dr. Knox is going to give you. Suffice it for me to say that it was these courses established at Paris and Lyons that enabled the Red Cross to keep the children's clinics and hospitals running when the American nurses and aides were called to military duty in the spring and summer.

The American Red Cross had a great advantage. It could ignore all local differences of ways and means. The Children's Bureau took great pains to seek the advice of all people interested in Child Welfare work in any locality. The physicians of the Children's Bureau always said: "We have not come to take *sides* with any society or person in this community, we know nothing of the differences of opinion that may prevail here between those of you who have worked so faithfully for your children. We recognize just one claim here, and that is the needs of the children of this community. We ask that you all unite in the effort to save the children."

It was simple, direct and honest, and the French people responded with an enthusiasm that has made for new unity in the local problems of child welfare.

The Child Welfare program, therefore, which has been carried out by the Children's Bureau of the American Red Cross during 1917-18 is probably the most lasting and constructive of all the work for the French children, because the French have taken such definite part in all the plans for exhibits and in actual exhibits held. The Ministry of the Interior through its public health service, and

the French National Society for the Prevention of Infant Mortality, have worked shoulder to shoulder with the Children's Bureau.

The Chief of the Children's Bureau asked the French government to send home with him a French physician for a six weeks' trip over the United States to study the child welfare centers in this country. Dr. Paul Armand Delille was chosen and the trip was made. Upon their return to France, Dr. Armand Delille was made the liaison officer between the Children's Bureau of the American Red Cross and the French government, in this way bringing to the staff of the Children's Bureau an eminent French physician well fitted to guide the work for children in France into an integral part of the government when the time is ripe.

But other things have gone into the constructive work done in France that are perhaps not emphasized so much as well-organized programs of work. I mean the splendid spirit which the men and women of America put into their daily work and contact with the French people. The attitude of the doctors and nurses toward those among whom they worked was a very fine and beautiful thing, and will never be forgotten by the French people. So many incidents stay with me that illustrate this, but one in particular I shall always remember. I remember very well being at Evian one night, and I remonstrated with a young doctor on the staff who was clearly overworking himself. He had examined that afternoon seven hundred children, and he was staggering with fatigue. I urged him to have fifteen or twenty minutes rest before the next convoy came in, and I shall never forget his answer. There was still a row of some dozen children waiting to be cared for. He said to me, "You forget these are the children of the men who said 'They shall not pass'," and he went on with his work. And in all our hospitals the spirit with which the nurses worked over those poor little homeless children, driven out with the stamp of the great war on their faces, was something that I feel has gone very deeply into the child-life of France, and that years hence will bear fruit. The French people appreciated everything that was done for them, and the doctors, in their different stations, were almost revered by the people. Since my return to this country I have constantly heard from different sections of France, and it is always praise of the doctor and the nurse and the worker who is there helping those people in their great need.

And as I said at the beginning, the men and women who were doing the work never spoke of their difficulties or their hard places, but went right ahead with cheerfulness and gladness in the service they had come to render. It meant tact and skill and a very slow, careful adaptation of methods to the French situation. And that, I feel, has been a real contribution to the cause of the children of France. In all that was done by the American Red Cross there was a constant effort made to have the French people take as large a part in the work as they would—members of their government and medical men and social workers—so that when our men and women come home the plans for the children's work will have been so thoroughly received by French thought that a national program for child welfare will become an essential part of their government work.

In closing, let me say a word or two for the work of the French government. The French government had a great job, and we of the American Red Cross must never forget to give credit to the French government. We were simply a drop in their great bucket of war—a very fine and splendid drop to be sure, but still a drop. The French government is doing so much for their own people, and they took such infinite pains in approaching the problems of the refugees and the repatries that it sometimes took our breath away to realize with what delicacy the French government handled situations. They made such a splendid attempt to receive their people back into their country intelligently. That is, to send them to the departments where they would best fit into the life they were accustomed to. They sent agricultural people to agricultural districts—they sent people from industrial districts to industrial districts, and they did not only treat them in groups in this wise way, but they cared for individuals. I remember one cold, rainy night at Evian one old woman who came up to register. She was asked the usual questions and she answered them all. She said she had no one left, and that she was quite alone. She was asked where she would like to be sent, and at first she said it did not matter, but at last she looked at the girl at the desk who was questioning her, and said, "Well, I would like to live near a cathedral, I have always lived close to Rheims." And so that old French woman had her wish gratified, and was sent to end her days close to Chartres.

Another instance of the care they took about small things that can mean much, was the story of the tagging of the children. As the

children entered Evian they had large tags tied on them, indicating whether they were orphans, or motherless or fatherless. The French objected to this ugly tag that told so pitilessly the truth in a language all could read, so they had little bone chains—bead chains—made white, blue and red. If you had just a mother you wore a blue chain around your neck; if you had just a father, you wore a red chain; if you had no one belonging to you, you wore the white chain, and none but the officials knew what the chains meant.

So, as we worked with the French people for the children of France, we had a real insight into the character of the people. And all the men and women who have worked for the children of France will treasure that glimpse into the heart of a great people, always.

The Chairman: That delicacy to which Mrs. Lucas has referred is a thing I think we sometimes lack. I wanted very much to have you hear what Mrs. Lucas had to say, but I also want you to hear some one who was closely associated with the work, and I will now call upon the assistant chief of the Bureau, Dr. John H. Mason Knox, Jr., of Baltimore.

Dr. J. H. Mason Knox, Jr., Baltimore: We are fortunate, indeed, to have had this delightful description of the situation in France from Mrs. Lucas, who was thoroughly in touch with all the work of the Children's Bureau. It is difficult for those in this country to have a clear conception of the atmosphere in which we worked in France. It was an inspiration to all of us to hear the expressions of gratitude and to have the kind of co-operation which we received from the French people in our work there. I think this association should congratulate itself in realizing that the opportunity to go promptly to France was due largely to the active interest of Mrs. Putnam. We were primarily asked by the French government, but the opportunity was sought for, and it was only when that opportunity was obtained and utilized that the work really developed.

I want to speak briefly of but two or three features: First, the Problem of Relief.

Many French children had suffered greatly from the war. This was true all through France, but particularly in those places where the inhabitants had been driven from their own homes and crowded into strange places throughout the country and in those devastated areas where many people, including children, still lingered.

Our first job then was to try to meet the distress wherever it was found. Our attitude, as Mrs. Lucas has said, from the beginning was to place ourselves at the disposal of the French people. Almost the first task attempted was to care for a group of 500 children from the regions around Toul and Nancy. These children were too young to wear gas masks and had to leave their homes which were within the area of shell fire. They were gathered together by the French officials and the American Red Cross was asked to supervise them medically. That work was well started by Dr. Sedgwick and carried on afterwards by Dr. Ladd, of Boston, and members of their staffs. That was the beginning of many interesting opportunities which opened up in the war zone. These children, with some mothers, were received in a large military barracks. In connection with this a dispensary was started and this soon became the civil hospital of the neighborhood. It was increased from fifty to one hundred and finally to two hundred beds when the obstetrical hospital at Nancy was evacuated to this barracks.

Several of the nurses and midwives from the Nancy Obstetrical Hospital were transferred with their patients and were greatly impressed with the cleanliness and thoroughness of the work at Toul. From the institution as a center, a rather extensive system of rural ambulatory dispensaries in the nearby towns was developed. With the co-operation of the American Fund for French Wounded a series of teams, each consisting of a doctor, a nurse and a French-speaking nurses' aide would visit regularly the villages and large manufacturing towns within a considerable radius which were almost without medical service. Here there were old people with chronic diseases and many children without medical aid. It was interesting to see the growth of this work. When I left France there were nearly thirty towns of various sizes reached once or twice a week on regular schedule by these ambulatory dispensaries. A notice would be placarded in a prominent place, stating that at a certain time the dispensary would be opened. The team would arrive and hold a clinic in these more or less devastated towns. The automobile would be stopped often en route because they passed at regular times, and aid would be requested for some special case. In one town, Pont-a-Mousson, the work was carried on within range of the German guns. The city was greatly damaged; its square was barricaded and behind the barricade alone

the city life proceeded, and here our dispensary was opened. Later, in other sections several tuberculosis camps were opened, where tuberculosis patients could be taken for the day, fed, given sunlight and fresh air, and taken back to their homes at night. This work for the civil population was extended over much of the war zone. At one place, Chalons, we co-operated with work which was being carried on by a devoted English midwife, who for two years had conducted there a large obstetrical hospital. Here we opened a baby clinic and an ambulatory dispensary in neighboring towns.

In the larger cities, particularly in Paris, dispensaries were opened and personnel furnished to existing French dispensaries, many of which were partially or completely closed. It was interesting to see how various opportunities opened up. We usually think of America and England as the homes of the social settlement idea. Far from it. There were several examples in Paris of splendidly conducted social settlements which had been carried on for years. In two of these places we were able to open much-needed dispensaries and furnish nurses. In one of them a dispensary room had been built but never used because of the war.

Our dispensary work led to the discovery that many Paris children needed not so much drugs, not so much advice, as they needed food; not that they were starving, but their state of nutrition was under par. Additional food was required, and on inquiry we found that Paris children, as a rule, had their principal meal supplied to them at the schools and the schools had been obliged to curtail to a large extent the amount of food distributed.

We had some interesting interviews with the mayors of half of the wards of Paris and asked them if we could not supplement the food in the school canteens. The work expanded until we were providing about forty tons of food a month to the school children from the Red Cross storehouses. The first distribution of food was always accompanied by some little formal "occasion" where the co-operation of America in the war and the sympathy between America and France was always spoken of by the French officials and others. That of itself was worth while and perhaps had an important effect upon the esprit de corps of the French people.

In our home visiting in Paris our nurses distributed postal cards which stated that the American Red Cross nurse had visited the

home and would care for the children in case of illness. These cards were signed by the mothers and addressed to the fathers of the children at the front, or in the factories. We received a large number of grateful replies from the poilus expressing their appreciation.

On the staff of the Bureau were a number of skilled specialists from this country who did excellent service. We converted a private hospital in Paris into a nose and throat hospital, where children needing nose and throat operations could be treated. Many complete removals of tonsils and adenoids were done in suitable cases with gratifying results, and the doctors who performed the operations received many grateful notes from the parents. Similar work was done later on at Marseilles, Bordeaux and several other centers.

Second—The Constructive Problems.

We had unusual opportunity to promote the cause of child welfare. Allusion has been made to the exhibits. This effort was made I think intelligently and brought before the French people the means of arousing interest of child welfare. The great need in France of doing something for the baby has long been recognized, but the methods we have been accustomed to using here and in England were not so generally known. The first large exhibit was the one put on at Lyons, of which Dr. Grulee spoke yesterday more or less in detail. I was much impressed in visiting that exhibit with the interest the people took in it. On one occasion I saw a thousand people outside in the rain with umbrellas up looking at the cinematograph, depicting some phase of child welfare. The interest they took in the Punch and Judy show was phenomenal. Punch and Judy, I believe, started at Lyons, and was made this year the means of carrying a lesson regarding infant welfare to the people. It can be used in this country also to teach a message about the care of the baby to the ignorant mother. In this show the parents ill treated their baby, but were reformed and instructed by the nurse and policeman and doctor, and all ended happily. The performance was given twice a day during the three weeks of the exhibition at Lyons. The hall was always crowded.

One of the important things we did, as Mrs. Lucas has said, and Dr. Grulee has alluded to it, also, was the getting together of existing French organizations. France is an old country with a great many prejudices. The lack of co-operation among the French was quite em-

barrassing at times, but it seemed always possible through American doctors and nurses to work in harmony with the various organizations. Frequently unity of action was secured between societies which had formerly been antagonistic. At Marseilles, for example, seventy-five societies doing all sorts of philanthropic work were brought together, working through smaller committees and with the Red Cross.

In addition, small exhibits were planned which were just as important as the larger ones. An exhibit small enough to be carried in an automobile went to one Department after another in connection with the Rockefeller Commission against tuberculosis and carried the lesson of infant welfare and tuberculosis to the larger cities in each Department, staying a week in each city and taking perhaps six weeks or two months in a Department. Several Departments were covered. These exhibits were begun by a formal opening attended by the officials and prominent citizens. During the stay in a city lectures were given by French physicians on the two important subjects, tuberculosis and child welfare. We tried in every instance to follow up the interest which was aroused. The French organizations interested in babies or in tuberculosis were encouraged and assisted.

Perhaps the most important contribution of America, in the relief of the civil population, if one contribution can be spoken of more than another, was the demonstration of the value of home visiting by a socially trained nurse. This had not been done to any extent in France. They had good institutional nurses, but the following up of dispensary cases in the homes and instructing mothers in tuberculosis or upon the care of the infant was not generally done. The American personnel was too small to do this. It was exceedingly important to see if we could not have the French people do it, and many women of the right sort for this kind of work were willing to take several months of training in the courses opened at Paris, Lyons, Marseilles and Bordeaux. After four or six months of more or less intensive work, with lectures by French doctors, field work in the dispensaries and in hospital wards, a really excellent group of nurses' aides was turned out. The French women were sent with the American nurses to the various towns where follow-up work was needed after the interest aroused by the exhibits. In this way a great deal of seed was sown on fallow ground which will spring up and yield fruit later on.

A system of scholarships was suggested which I think will have a far-reaching effect also. You know that France has lost a large percentage of its wage earners, and it is exceedingly important that the children of the country should be educated practically at an early date to take the places of their fathers, so a system of scholarships was established whereby the boys in homes can go to school and learn a trade, spending a year or two, or three years as required. The money furnished will be sufficient to enable the particular boy or girl chosen to undertake the training which the French officials think the child ought to have.

What I have said gives you an idea of some of the things the Children's Bureau tried to do in France. Every baby in France counts double as compared with most other countries because of the low birth rate. This is the time, it seems to me, all over the world, certainly through the allied countries, when a concentrated effort ought to be made to advance the cause of infant welfare.

This association has a particularly important job on its hands because it is "all America" in scope. It ought to enlarge its activities so that it can advise and keep in touch with all the work done throughout the States and Canada, and adopt new methods or suggestions which may be found more effective in reaching every child. I would appeal to the affiliated organizations represented here to keep in touch with the central office as far as they can, so that suggestions coming from the central office may be used to extend your work in your several communities. We must take this time when the whole world realizes that the world has been made safe for the future, to have more and better babies to enjoy the safety, which our boys in the trenches, the poilus and the English Tommies have made possible for us.

THE LYONS BABY SHOW

CLIFFORD G. GRULEE, M. D., Chicago.

I suppose the best thing I can tell you about is probably the Lyons Baby Show because that was one of the things in which I was vitally interested very early in my work in France, and it is something that appeals to an organization of this sort more than anything else.

I arrived in Bordeaux the fifth of February and went to Paris the following day, and immediately Dr. Lucas told me that they were thinking very strongly of putting on a baby show at Lyons, and he

thought it might keep me busy. I went down to Lyons on the 20th of February, and the next day Dr. Lucas came down. We had a conference with several people. Before we went down we had plans all made to hold the baby show in the exposition building, with one floor probably about the size of this room—a room which accommodates approximately five hundred people. When we got there we found that the mayor had made a mistake, as the building which he had selected for us was to be taken by the art exhibit, so that our scheme was thrown into the air. At that time the mayor's secretary came to the rescue, and we at once took the automobile show building. Lyons has a fair which corresponds to the Leipzig fair, and this fair has booths for automobiles. These booths are three hundred feet long and one hundred feet wide. We looked at it, we were rather abashed, but we took advantage of the proposition and said we would use it for the baby show. We took this rectangular building and divided it into three main rooms. One of these rooms comprised one-quarter of the building. This became an amphitheater which would seat between one thousand and twelve hundred people. We used the main room for exhibits, and the small room for committee meetings and other things. The main room was so arranged that the central portion contained the large exhibits, such as playground exhibits, food exhibits and large placards used on partitions. In this room there was a glass house. Around the sides were booths in which we had exhibits of different sorts. Each one of the Lyons charities had a booth. We had a model hospital at one end. We had food booths, we had two tuberculosis booths, a hygiene booth, and a booth where art pictures of children by various French artists were displayed. We had a booth for school hygiene, one for prenatal hygiene, and one for breast feeding. One end of the building was taken up with the demonstration of artificial feeding, the preparation of foods, etc. We got all these things together and opened the show on the ninth of April.

The opening meeting was quite a triumph because at that meeting we were able to get together the chief dignitaries of the town, who were not altogether congenial. We had, for instance, the mayor of the town, prominent men in the politics of France, and we also had the governor and military governor. The military governor declined to make a speech, but three of the other men spoke from the same platform, a thing which is very unusual in France. Before the opening

meeting we were told to send out as many invitations as we could have printed, but it was thought there would only be a handful of people there. We sent out twenty-five hundred invitations and the room which accommodates about twelve hundred people was crowded to such an extent that there was an overflow in the main portion of the building.

The next day this exhibit was opened to the public. We had American women there who spoke French well enough to be understood, and who demonstrated certain phases of hygiene and dietetics. The glass house I spoke of was a rather pretentious affair, especially in France when wood and glass were so hard to obtain. I was going to say my hair turned gray, as you see, before we got that glass house up. At 8 o'clock at night, before we opened, there was not a speck of that glass house up, and if you know the way French workmen move you will realize we were rather perturbed. We finally got the glass house up. In that glass house we had an American trained nurse who several times a day would bathe and dress babies. Then the baby would be carried into the second room, put in its crib, and the window opened. We had no difficulty on the part of French mothers in bringing their babies; they were glad to bring them there.

This baby show, as I have said, was held during the month of April. The time during which it was open was twenty days. We had a turnstile so that we knew how many people went through, and during those twenty days one hundred and seventy-seven thousand of the population saw the baby show. It was the largest baby show in point of attendance that was ever held. That baby show was not only of value for what it brought in the way of suggestions to the French people in regard to infant hygiene, but it was of value from another standpoint, and I think it has never been sufficiently understood in this country what the American Red Cross meant in France. We must remember that in this fourth year of the war France was pretty well depleted of men, material and everything. She did not have much to go on. The only thing she had to go on was hope, and that hope lay principally across the sea. We meant the hope of France, and the American Red Cross meant a great deal to France in keeping up the morale during that period. It meant a great deal to the French soldier to feel that the American Red Cross was back of him when he was at the front in looking after his wife and children and doing for

them, and a baby show of that sort was enough to bring to the hearts of the French people the fact that America was back of them, and it was only a question of time when we accomplished what we did for them.

One very touching thing about the baby show was a little ceremony which was performed one Sunday afternoon. At the request of the mayor of Lyons we arranged a little entertainment or Sunday afternoon celebration, as he wanted the children of Lyons to show how much they appreciated what was being done. On that occasion I think practically all the high officials of the Red Cross in France were present—Mr. Davison, Mr. Wadsworth, Dr. Vincent, Dr. Farland, Major Folks, Dr. Knox, Dr. Lucas and others, practically every one connected with running the show. All the men from the hospitals were present, and these children, after making a little speech came up and presented each one of the officials with a bouquet. The whole ceremony was touching. They sang the Marseillaise and then we all went away.

The only one feature I have failed to mention about this baby show which was really of great interest to the French people, and I think is one of the things we are going to leave there, was the playground work. We had plotted two plots, one for kindergarten work and one for playground work. We had American playground workers to conduct these. We taught the French girls how to conduct this playground work in American fashion, and it was one of the things most interesting not only to the girls but also to the people; it was so interesting that the normal school there adopted it and trained several pupils in our institutions under our instructor, Miss Pierce.

II. WELFARE WORK IN ROUMANIA*

KATHERINE M. OLMSTED, R. N., Chicago

In the early summer of 1917 Queen Marie, of Roumania, sent an appeal to the United States for medical aid and material relief, saying her people were dying of starvation and fever, and because France and England could not help her sufficiently the appeal was turned over to that one big organization which could so well give relief and medical aid—the American Red Cross. As a result, a Red Cross Commission started out to study the conditions in Roumania and

*Presented at the Session on Nursing and Social Work, Miss Estelle L. Wheeler, R. N., chairman.

report back what the little country, then one of our allies, needed the most. The Commission was composed of eight men, most of them experts in camp sanitation, public health and sociology. Twelve doctors and eleven Red Cross nurses accompanied them. We started on our journey in July, 1917.

The supplies went by way of the Atlantic and Arctic oceans and landed in Archangel. The supplies contained a complete hospital equipment and much food and clothing. After the supplies started the revolution in Russia became so acute they sent the Commission by way of the Pacific, thinking the longer way would be more certain and in the end take the shortest time. Our excitement started when we reached Japan. We received a message from Kerensky, who had just come into power in Russia and was eager to stand in with the American government, that if we waited at Vladivostok he would send the Czar's imperial train to take us to Roumania at the expense of his government. This train was to take the Czar and his family to their prison in Siberia and then come to get us. We spent about eight days in Japan before we could get transportation over the Sea of Japan, and we had a wonderful time visiting the hospitals, stores, temples and the institutions there. We had an excellent opportunity to see the type of health work in Japan. It was wonderful to see especially the work of the big Red Cross hospital, where they had five hundred nurses to about three hundred patients. At first, we were quite surprised, but we were told they did much outside work. They had stretcher drills, they rode horses and went through many of the same set-up exercises that the soldiers do. One of the Japanese baronesses had been to Chicago and told us that she had adopted Chicago methods in the Training School for Nurses. The nurses now wear white linen uniforms. Previous to the Chicago visit they had worn long kimonos. We were invited to dinner at the hospital with the nurses and the uniforms, while a good deal more like those seen in our institutions, were not quite typical of Chicago. They had a tight-fitting, sensible linen cap, thought to be a very nice American style. Their uniforms, however, were very short, about three inches below the knee, and all nurses were bare-legged and often bare-footed, except when they had very short bedroom socks on their feet. They were intelligent, quick, bright, interesting little nurses. Many of them could speak some English, and we had a most amusing time

with them. They taught us to eat with chop-sticks and served us with artistically arranged patties of ground-up bird-wings, bones and all, but so beautifully arranged on little red lustre plates that they were almost tempting.

Leaving Japan we finally reached Vladivostok. The imperial train was wonderful, but it was a long trip even in a luxurious train, as you will realize when I tell you that it took us fifty-two days to get to Roumania; not that the train did not go fast enough, but it stopped so often. One day a crew would get out and would stay for half a day cutting down wood and putting it on a freight car back of the engine, because the engines in Russia all burn wood. The next day we would have to stop and another crew would get out and butcher, as we had a freight car filled with all kinds of pigs, lambs, fowl and game on the back end of the train. Every time we came to a nice stream everybody was expected to get out and go in swimming. You could not hurry them. Anxious as we were to get to Roumania before the Germans took all the little country the train took its time, and if we did not go swimming the train did not go anyway. When a nice field would come in sight the train would stop and the men would all play baseball for an hour or so. Finally we reached Moscow pretty well tired out, and owing to some trouble ahead tracks and bridges were destroyed and must be repaired, so some of our Commissioners went to Petrograd and the rest of us waited in Moscow. We lived in the train, as the city was under martial law and seemed tense with controlled excitement. Streets were packed with soldiers watching and waiting for something to happen. We spent ten days in that old, fascinating city.

We were especially interested in the Russian medical dispensaries which are scattered pretty well all over the country. The Czar was much interested in medical problems. Notwithstanding the revolution in Russia and that everything was in a state of turmoil, we found these dispensaries were still going on. Doctors were still there, and all day long there was a line of patients waiting in every little dispensary. All through Russia there had been placed good medical men by the government, usually men who have been sent by the government to study medicine in Germany or in England, and in each dispensary they had a doctor and a number of students, and fifty or sixty well-trained midwives, who have taken three years

of training in a maternity hospital training school; also a group of persons we would call social workers, who were very much interested in knowing about our American public health nurses. Some of these social workers were men and some women; all seemed to have had some training, gave relief and followed up dispensary cases. The midwives always delivered the cases and the doctors stood by and watched and advised.

We finally left Moscow for Roumania, still in our imperial train, although Kerensky had by that time lost his position and no one knew where he was. Our train crew were evidently ignorant of this fact and we did not enlighten them, as it was practically the only train running. The government having owned the railroads, when it was overthrown each man who had been an engineer simply took the engine he had been running and finding a freight car put his family in it and toured the country.

When we at last reached the little country we had travelled so far to help we found it in a most deplorable state of starvation and ridden with typhus fever. The capital and three-fourths of the country had been taken by the Germans, and a large number of Roumanian refugees and many Serbian women and children were crowded into this little section, about the size of one of our counties, where 25,000 people had lived, over 500,000 were crowded in. Every house and store was filled and every night the streets were filled with women and children sleeping as far as you could see down the roads. Every morning the military police drove through the streets with an oxen cart and gathered up the women and children who had died of starvation and fever during the night and dumped them in a ditch outside the town. The people adored Queen Marie. We seldom heard anything about the king, but the queen was very popular with her people and they had followed their queen with childlike faith to this town because they believed that in some way she would be able to protect them. Typhus fever had wiped out village after village and starvation was taking the women and children in great numbers.

Let me give you a brief description of one of the hospitals we went into when we first got there. It resembled a large barn and in it were packed about two thousand wounded and very ill soldiers. Many still had their uniforms on, blood-soaked and ragged. Hovering

over them were little Roumanian women, dainty, painted and helpless, never used to working with their hands, but doing what they could to help their wounded men. But they had always had a great many servants and were perfectly helpless when it came to work. There had never been any trained nurses in Roumania and most of the doctors had died of typhus fever, so hundreds of sick and dying men, women and children were everywhere around us and were suffering intensely and dying needlessly because of the lack of skilled medical and nursing care.

Our supplies had all been held up in Russia. We had really nothing except the soap and scrub brushes that we had picked up in Siberia to help these people. We had bought soap and scrub brushes in almost every town we stopped at and we picked up a very few supplies here and there, but were totally unprepared to start a hospital. We thought at first that we could not stay, as we had so little to work with when the need was so appalling. Food and clothing was what they needed most horribly. Medicines and surgical supplies were all gone, cotton, gauze and bandages had long since been used. You can imagine eleven nurses getting into a country with all these people so desperately in need of instruction in how to keep clean, because it was a problem of cleanliness in order to prevent the spread of the epidemic of typhus fever. The doctors and nurses stayed. The eight commissioners started back to get supplies to us as soon as possible. We had to stay in that crowded city of Jassy several weeks eating at the officers' headquarters, even the highest Roumanian officers and high officials were living on a little thin soup at noon, black bread, tea and cabbage, and perhaps another dish of thin fish soup and tea and cabbage for the night meal, never but two meals a day.

When we first got there we felt it was almost a crime for strong and healthy people like ourselves to take food when these people needed it much more than we did, as even the officers looked thin and pale and we knew that on such food they could not possibly be strong and keep well and how the poor civilians must be suffering. We finally found, 60 miles from Jassy—almost in the trenches—an old hospital building, large, barn-like and with very little equipment, but at least more than we had. Two English doctors and four nurses, refugees from Serbia, were trying to run this hospital; they were

without supplies, having used paper and sawdust for gauze and cotton. When we arrived they were only too glad to return to England, as they were all sick with jaundice and starvation. We took over this great big old building; it had been an old monastery hospital, enclosed with a high wall and tower. We wanted to get just as near the front as possible, as there were no ambulances and we could not buy even horses. The big last offensive on the Eastern front was just finishing when we got there and we had to continue our struggle without supplies for four months, much as the English had done. Hospitals were without gauze, without cotton or bandages. Every bit of cloth any doctor or nurse had was cut up for packs. The doctors had to operate with marvelously few instruments and paper and all kinds of wood pulp were used for dressings. We could not get food enough to feed these boys, and they were just boys. When the Germans and Bulgarians so strong in numbers came over the Roumanian front every man and every boy went to protect his country. Men of eighty to eighty-five years of age went first and boys of twelve years followed the army, and when the older men would drop out the boys would take the guns and go on to protect their country. The patients averaged from fifteen to seventeen years of age. We had in the hospital, besides soldier boys, many children. As the army retreated the Germans would do such terrible things to the children left in conquered villages that the Roumanian government ordered the army as it retreated to gather up all the children under sixteen years of age in every village, and they were packed into freight cars and pushed back into the safety zone with the retreating army. The soldiers would push the cars themselves until they got some place where the children could be cared for. Sometimes they said they had been packed into the cars so tightly they couldn't even sit down and often it was forty-eight or fifty hours before they were released. The older girls up to sixteen years of age, often holding babies, had been without food for a long time. Some of them wore good clothes and had come from wealthy families; others were in rags. All were homesick and so pathetic, never getting any word from their families. They were sent into the hospitals and institutions and worked for their board, which was meagre indeed. Watching and longing for peace, because that meant they could return to their homes and find their mothers and friends. We had besides all

these children about five hundred soldiers to take care of, with only eleven nurses; we often had two hundred patients apiece, as some nurse was always on night duty. We had children who were really the victims of German propaganda work along the front. The German and Bulgarian troops had terrorized the Roumanians by taking section after section of their country and depriving them of all food, actually stripping villages of clothing, carpets and all material. In fact, the entire country, which had been the wealthiest of all the Balkan States, was without even the necessary clothing, and it was impossible to buy anything; not a nail, a needle, a piece of thread or a piece of cloth could be purchased in the country. The stores were empty of stock and filled with half-clad refugees and children. Many of the little frontier towns were not only pillaged but bombed, and many women and children were killed and badly wounded. We had children in our hospital with their hands blown off, their faces and eyes badly scarred and wounded from little bombs evidently put by propagandists around the places where children play. Exploding pencils and poisoned candy were often used, and the children were so hungry they would eat anything. I shall never forget the number of orphans in that tiny country. The women had died of typhus fever in great numbers and the men had been lost at the front by the thousands. The typhus fever did not seem to affect the children, but the adult population had suffered horribly from the disease during the previous winter. Children were left, hundreds of them, orphans, without friends or homes, to starve to death. You could not walk a mile in that country without passing at least three orphanages. The uncaptured country was about the size of one of the counties in Illinois and we visited in that small territory over two hundred orphanages. These orphanages were the most pathetic sights of the war. Not a child in the country had clothing enough to go to school, so all the school houses were turned into orphanages. The school teacher was given fifteen cents a week to care for the orphans by the Government. There would be from eighty to one hundred of these in one room—the typical one-room mud house of the Roumanian peasants. All around the wall would be a wooden shelf of rough planks about three feet wide. In the centre of the room a mud stove with a black kettle on top, a few tin cans around it. On this shelf around the room would be packed little children from a year up to ten or twelve years of age.

Never in all these orphanages did we find more than ten out of eighty children who had more than one cotton garment on, and it was a cold country, bitter, raw, winter weather. These children looked like rows of little skeletons packed around the shelf, their hands and legs blue with cold, and the teacher would tell us that this was the third or fourth lot of children she had had and when we asked what they died of she would point to the black kettle; she would often show us that she had plenty of money, but could not buy clothing or food. The only food left was black corn and that was all taken over by the government. Every woman with a soldier at the front was given a dollar and twenty cents a month. The soldier himself got only eighteen cents a month. Every woman in that little country who could walk, who had two legs and two arms, was struggling to support not only her own children, but often her sister's children and her neighbor's children. They were caring in some instances for twenty-five little children. Often she did not even know their names. They would come to her and she would try to care for them.

In these tiny villages from two in the morning until eleven o'clock there would be a long line of these mothers waiting to get a loaf of bread, and as a rule fifty or sixty of them were turned away from every bread house because the bread had given out for that day.

We finally received our Red Cross supplies, and while all the food had been taken we were so glad to get the gauze and cotton. We were able to send clothing, blankets and medicines into other struggling hospitals, into orphanages and homes. We never had, however, even in our own hospital, enough to give each patient more than one sheet under him and a blanket over him, and we struggled hard to get a clean sheet as often as every ten days. The laundry was a great problem. The military police of the town would line up a few people for us occasionally and we would have a wash day, cold water, no soap, no tubs, wringers or machines and the poor, ragged half-starved women with naked children at home would naturally enough steal everything they could; a sheet or a bit of cloth meant much more to them than all the money we could give them.

All of our gypsies come from Roumania, and you know stealing isn't a crime to them; it's just a habit, and we had to lock up everything almost before we took our eyes off it or we never saw it again. Treasures like soap, matches, thread and cloth could never be left out

a minute. We couldn't really blame them, they were so badly in need of everything, and it even became the proper procedure to put your clothing, and especially your shoes, under your straw mattress when you retired, so that you might be reasonably assured of finding them in the morning. The hospital was run, in a way; refugee women were taught to care for the sick, because we knew that our time there was limited, as they were almost exhausted when we arrived. We tried to do what we could for the mothers and children outside in the villages. There was not a Roumanian doctor who in any way could help the women and children who were sick. Only a very few doctors had been left, all the others died of typhus fever, and those few were taken by the military authorities and kept near the front. We put up a big sign on the gate of the hospital, saying all women and children needing medical care could come to the hospital between two and four every afternoon. We fixed up a room with an outside entrance as an out-patient clinic, and before one o'clock day after day we had eighty to a hundred women and babies, some of them the sickest and most pathetic sights. We visited their homes when they were too ill to come to the hospital and we made many calls every morning. We had so many very sick mothers and babies that we were caring for in their homes and our out-patient clinic was becoming one of the busiest and most interesting parts of the hospital, when we were suddenly forced to drop everything and with about twenty minutes' notice we ran for our lives and away from the approaching Germans.

I would like to tell you briefly how we got out of Roumania, for we had exciting times in that hasty retreat. The Russians had stopped fighting except with their own officers and were leaving their trenches. We knew we would have to leave; that we could not wait for the Germans to come into the country because they had not respected the Russian Red Cross or any other Red Cross on that front. However, we had so much work to do that we undoubtedly stayed a little too long. The first night after the Russians had left their trenches there was a great deal of rioting in the streets and the Roumanians came down from their trenches to put the Russians out of their home towns, as they were eating up all the food of the Roumanian women and children. They put every Russian soldier out of Roumania and drove them all up into Bessarabia, where they attempted to keep them. This left us with not a soul between us and the Germans, Bul-

garians and Turks, and yet our only way out was to go through Odessa, which was in the hands of the Germans. We went through all the thrills of being captured and had been for several weeks entirely cut off from any way of escape, while we waited for the Roumanians and Russians to settle their differences, and hoping that the Germans would leave Odessa, so that we might get out. We never have quite understood why the Germans did not come over and take our hospital, unless they were saving us for some special feast day.

We had our walking essentials all packed and ready to start out on foot at a moment's notice; we insisted we would not argue with the Turks. As usual, when things look so black you can't see through at all, and all hope was gone and we could almost imagine the Turks were entering our gates, a message came that if we wanted to escape with some military men who were going to fight their way out through Russia, and if we would go as fighting men and take our chances we could go with them. It took us a mighty short time to pack and leave the hospital and get started. We had to go about sixty-eight miles to reach them and when we finally sighted our point of mobilization we found six trains pulled up in the woods. Every one was armed to the teeth and each train carried many cannons and machine guns, all prepared for heavy firing. We found twelve hundred Frenchmen who were greatly excited and all seemed to be talking at once, loading ammunition and supplies into the trains. We were terribly surprised to see so many French officers. We did not know they were in the country, because they had been in peasant costumes and other uniforms and had so escaped Russian interference and their presence was not suspected by the Germans. They had dynamited bridges, warehouses, oil wells, mines and railroad tracks all through Southern Russia and Roumania so that the Germans could not get through to get the crops and grain from Ukrainia and Siberia.

The Germans had not collected in large numbers and not expecting so many Frenchmen to be together in that part of the country we were able to get through even Odessa safely. Transportation facilities were bad, the food was worse. When we got up toward Siberia we found German officers were collecting prisoners and had taken control of the Trans-Siberian road, and the Czecho-Slovak troops were not very well mobilized yet. We got near Petrograd and found it had been taken by the Germans. We spent some anxious and strenuous days wander-

ing around in Russia, living like tramps in a freight car, wondering if there was some way to get out of that huge country. We never knew in the morning which way our train would be headed by night, but finally we found ourselves bound for the port of Murmansk, one hundred and forty miles above the Arctic Circle, where there was a possibility of getting an English boat and finally getting to England. All the southern ports of Russia were in the hands of the Germans and the northern ones were all frozen up but this one, which was kept open all winter by the Gulf stream and the English had used it some to get supplies to the Eastern front. The English had put down a rather rickety railroad, never completed and built on marsh land and could only be used when well frozen. It was melting up some and we rolled along expecting to either sink or be smashed up any moment. Fortunately, we had daylight all the time, so we did not have as much trouble as we might otherwise have had with the tracks. At every station we were told that the last train which had passed sank out of sight, so we always had that to look forward to. We finally reached the little port. We were very hungry after living for ten weeks on practically black bread and tea. We waited three weeks before a boat came in, living in our trains, searching for food and getting thinner and dirtier every minute. We took the little boat, reached England, and were mighty glad to see once more a civilized country. When we reached London immediately the Red Cross of England took charge of us and treated us wonderfully well. One cannot say too much in praise of all the war work that is being done by the women in England. These women, with marvelous courage and without a word of complaint, are going without what seem to us almost the essentials of life, and sending all to their boys in the hospitals and at the front and the work that they are doing for their children and their babies, even through the stress and strain of war times, made us return eager to stimulate work for our babies at home that we may not be horribly ashamed of our statistics when they are compared to those of England, who has suffered so much.

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III. CHILD WELFARE ACTIVITIES IN THE UNITED STATES

THE PROGRESS OF CHILDREN'S YEAR*

ANNA E. RUDE, M. D., Children's Bureau, Washington, D. C.

When one has been in the center of Children's Year activities for nine months past and has had an avalanche of weighing and measuring cards, the handling of which has necessitated a special office and office force, it is rather difficult to realize that the whole world does not know all about the Children's Year campaign. But you have asked me to speak on Children's Year, and I am glad to have the opportunity to say something to you about what it has accomplished.

I assume that most of you here know that it is a co-operative or combined war-time program of the Woman's Committee of the Council of National Defense and the Federal Children's Bureau. The scope of the work as outlined embraced the general well-being of all children, but special emphasis was placed upon the reduction of infant mortality and the welfare of the pre-school child. While the primary aim of this campaign was the reduction of infant mortality by the saving of 100,000 lives, one-third of our annual loss of child life under five years of age, the real and great purpose was educational—to teach mothers so to care for themselves and for their children that there would be fewer victims of preventable disease, fewer remedial defects, and fewer avoidable abnormalities amongst the children of the nation. The war has made us stop and think in large numbers, for we had been told for the last five or six years that we were annually losing 300,000 children under five years of age, but this fact failed to arouse that sense of active responsibility which is really necessary if we are to cope with the situation at all.

During the year there have been three distinct Children's Year drives undertaken. On April 6, 1918, the campaign opened with a weighing and measuring test. This was intended merely as a popular educational appeal which could be made nation-wide. This drive was undertaken through the 17,000 local committees of the Woman's Committee of the Council of National Defense, which included most of the women's organizations of the country. Only through such extensive organization and co-operation was it possible to attain a maximum result with a minimum of effort.

*Presented at the Session on Nursing and Social Work, Miss Estelle L. Wheeler, R. N., Chairman.

We have had to send out, up to the present time, nearly 7,000,000 weighing and measuring cards. This means not only that at least hundreds of thousands of children have been weighed and measured, but that there are at least 13,000,000 parents in the United States, not to estimate the number of other interested relatives, who have definitely had their attention fixed upon the height and weight of children, a rough index of a child's nutrition. Unquestionably this is the largest mass of material on measurements of heights and weights that has ever been gathered. It is true that there are a great many chances for error in many of these weights and measures, hence it is not possible to use statistically all of them, but it will be possible to make tabulations from 100,000 cards. These will be records of selected cases where complete physical examinations were made by physicians and defects noted; thus one may feel that they are fairly accurate. From these data we shall also be able to make comparisons of heights and weights in cities, in rural communities, and for groups of children of foreign parents. If the only result of this weighing and measuring test had been to draw attention to the child's nutrition, the effort would have been justified. Fortunately, much more has been done, particularly in localities where there has been good organization, and where a state or county chairman secured the co-operation of physicians, making possible complete physical examinations. It is, of course, impossible to tell exactly how many physical examinations have been made, because cards are still coming in. Some localities which did not start early are still at work, and reports are most encouraging. One of our large but less populous states reports having measured and weighed 41,000 children; of these, 32,000 were given complete physical examinations by doctors. The work was carried on in about one-half the counties of the State, and is still continuing in many of these counties. Since this chairman considered the entire Children's Year program too comprehensive to be undertaken as a whole, she planned to have three drives during the year—that is, three weighing and measuring drives—in order to reach many more children, and to demonstrate the value of periodic physical examinations. They tabulated all cases given physical examinations, and they now report 17 permanent health centers in 17 different counties. Several counties have secured public health nurses, and the final aim is the establishment of a state division of child hygiene.

From a western city, not far from Chicago, where there is a population of 70,000, largely foreign, the child welfare chairman writes about the results achieved during the summer. Three child welfare nurses have been engaged; a milk inspector has been secured, and the city is publishing reports on the dairies supplying its milk. It was found that the milk was coming in from too great a distance, and so the city succeeded in securing a supply within a radius of 10 miles. A milk depot, a summer hospital for babies, ten volunteer graduate nurses' assistants, who help the mothers with the care of the children; and, as a permanent feature, four children's welfare centers have been established. This was done in a city where there were women's organizations, but where no infant welfare work of any kind had been undertaken previously.

In another large state, more populous than the one previously mentioned, and most competently organized, a very active state chairman has written that there is a county chairman in every county in the state, excepting four, and there are one hundred and two counties in the state. They report having weighed and measured 360,000 children. They have at present 1,111 committees, indicating active groups that are interested in various phases of child welfare work.

The states have varied widely in their Children's Year campaign undertakings, but there is not a state that has not taken some part in this year's program. In some localities milk seemed to have been the subject in which the committee was most interested. That was true in some of the southern states, where good milk seemed the greatest factor in reducing infant mortality; after making surveys of conditions, these states have established milk depots where milk could be sold at cost. In some localities a canvass was made to see just how many children were receiving no milk or an inadequate supply of milk. From one state, which has only just begun its Children's Year campaign, this report came in last week: "In a certain town we have weighed and measured 2,423 children. Of this number, 1,172 births had not been registered; so we are sending out cards to secure complete birth registration." Birth registration tests have been one of the popular features in many localities—making this test is one of the things that women have felt they could do.

With the lesson we have had from the inability of our recent draftees to give evidence of ages to prove their citizenship, I am sure that the whole country realizes more than ever before what birth registration really means; it would seem that with so many persons alive to

this situation, it might be possible with concentrated effort to have complete birth registration in the entire United States instead of in only twenty states and the District of Columbia, as at the present time. One other point in this connection is the desirability, when working for complete birth registration, to work for a good registration law. I say this because I was recently told of a large city where midwives are required by law to register births within thirty-six hours, and doctors, within ten days. If we stop to realize that one-third of all infant deaths occur during the first week of life, we see very clearly that we must look to the early reporting of births if the education and care which the public health nurse gives is to be effective. While one is working for complete birth registration one should work for a good registration law.

The publicity of Children's Year has been widespread. The posters and various leaflets that have come in as specimens of what has been done would make an interesting exhibit. The nature of the publicity has depended upon the ingenuity of local chairmen. The press, even in the most rural localities, has been liberal. Posters, dodgers and slides have been very popular, and one of the most interesting developments by way of propaganda has been the motorized health center. There were communities which felt that they could not undertake the Children's Year work at all, but an automobile equipped as a health center and labeled "Baby Special" or "Children's Year Special" has made Children's Year work possible, and is one of the new developments which I believe we can look to as having many educational possibilities in rural sections.

A number of chairmen have written that as a result of Children's Year work they are now having their first dental clinics. This has been another interesting development. One state has even appointed a state dentist, who is to travel throughout the state, spending from two weeks to a month in each locality and doing free dental work for rural children through the district school.

We have also heard of a great many nutritional clinics being established as a result of the realization of the importance of proper food for the child. One locality reports having undertaken the systematic feeding of infants and undernourished children. Hot lunches have been made possible in a number of the rural schools through the domestic science teachers, who have been willing to plan menus for a month ahead in some places. In one locality the domestic science teachers were planning diets for the pre-school age children, working in close co-operation with the school nurse, who reaches the parents in their homes.

One municipality has taken up the Children's Year program by employing a superintendent for the Children's Year work, and many of the localities have increased the number of school nurses, this being made possible through the co-operation of the Boards of Education. Also, since the beginning of the Children's Year campaign there have been several state child hygiene divisions established, making a total of nine such divisions, and in addition two states carry on this work under other state departments. There are still a number of other states that are working definitely to make this a logical result of their Children's Year campaigns, and they are generous enough to accredit the Children's Year campaign with having served to crystallize sentiment in regard to state child conservation departments.

During the summer the second drive of Children's Year took place—a Recreation Drive. This was undertaken with a view to increasing physical vigor and alertness and for the purpose of proving the value of recreation under competent leadership and supervision. As a result, there has been an added interest in many localities in permanent recreational work.

At the present time, a drive which is known as the Back-to-School drive is in progress. The latest reports we have show that there are definitely 22 States participating in the drive, through school welfare committees of the Council of National Defense. The object of the drive is to return to school the children who have been led by war conditions to enter industry. The cessation of war brings an added problem, because with the natural industrial demobilization which is about to come, there are many children who should be in school, and who need to be guided back by some means; it is hoped the Back-to-School drive will be a very effective means.

One part of the program is the initiating and establishing of scholarship funds with the idea of helping needy children who should be kept in school. A few of the larger cities have established these scholarship funds with the purpose of keeping children out of industry beyond the legal working age and giving them at least two years of additional schooling.

Another development during the year has been the recognition of a demand for more health education; with this in view the Children's Bureau is preparing for the Federal Board of Vocational Education

courses on the care of mothers and children for use in normal schools and colleges throughout the country.

Undoubtedly the draft rejections which we have seen within the past two years have helped to make clear how many physical defects we have as a nation, and the fact that at least half of these defects might have been eliminated during childhood. This has been a decided impetus in interesting the general public as to the physical condition of the nation's children; with the results of the weighing and measuring test as supplementary evidence, public opinion at the present time is really focused upon physical fitness. The greatest and most lasting benefits to be derived from this consciousness of the physical condition of the children of the country will be the establishment of permanent follow-up work; and we have especially to look for this, I think, in the inauguration of children's health centers, where periodic physical examinations can be given, and in the maintenance of public health nurses. These two provisions, the children's health center, and a sufficient supply of public health nurses, are the fundamentals to be considered in the follow-up work.

One very important development of Children's Year has been the realization of the necessity for standardizing all our welfare methods. We know that there are many large localities which carry on welfare work most efficiently; that there are many other localities where the work is poorly directed; that there is need to look to the standardization of all of our methods. To accomplish standardization we must effect co-operation of all existing organizations. All the measures which we utilize for the prevention of infant mortality are concerned with education and preventive measures as the only solution, and while we are all working toward the same end we must co-operate in order to accomplish this standardization.

There is no possible way in which to estimate the far-reaching results of Children's Year, but we can say that it has been a popular educational movement which has awakened our sense of responsibility for the welfare of children; that it has made clearer the need for more permanent follow-up work; and that it has demonstrated that maximum results in child conservation can be brought about only through standardization, which in turn is dependent upon effective co-operation and organization of all public health activities.

CHILD CONSERVATION SECTION OF THE COUNCIL OF NATIONAL DEFENSE

JESSICA B. PEIXOTTO, PH. D., Washington, D. C.

When invited to address this audience I did not realize I was expected to talk on future plans of the Child Conservation Section of the Council of National Defense.

On that theme I have practically nothing to say. The future plans of the Child Conservation Section of the Council of National Defense wait upon the decisions of the Cabinet about the future of the Council of Defense; from month to month plans will be subject to change. However, the Child Conservation Section can say this much. Its work will continue to be closely linked with the work and policies of the Children's Bureau; it will probably maintain a separate existence for at least another six months and during that time it will continue to urge the program which it has been popularizing during the past year.

I can therefore talk about the future only in so far as I can ask you to look backward with me in order to look forward. The nine months of war emergency work for children just passed furnish, it seems to me, an experience of which a review may be useful for national societies interested in the welfare of the nation and particularly those interested in the prevention of infant mortality.

The Woman's Committee was made one of the committees of the Council of National Defense to call out the organized women of the country and to centralize the work of all women volunteers whether organized or not. While it cannot be said to have accomplished altogether this idealistic task of centralization, none the less the Woman's Committee has developed the nucleus of a national organization and has carried out with relatively high effectiveness the various tasks assigned to it.

One of these tasks was Child Welfare. When a Department of Child Welfare was created Miss Lathrop took charge of it at first. Her regular official duties were so exacting however that she asked the Women's Committee to call another executive head to co-operate with her. This was done last January. In April Children's Year was announced and the Children's Year program was sent out to forty-eight state chairmen of the State Divisions of the State Councils of National Defense. This audience is, I know, sufficiently familiar with that program. Each of my hearers has probably helped in his or her own community to formu-

late local plans by which to further the Government's program for better public protection of maternity and infancy; home care for older children; school attendance enforced to 100 per cent, and for nine months in the year, and good recreation in plenty. For this reason and for the further reason that others at this conference have told you the details of Children's Year I shall not dwell upon the program itself.

The future of the Child Conservation Section like its past will see it perform the special duty of developing and maintaining an organization. I think it is safe to say that Children's Year has meant the widest use of volunteer service this country has ever known. The educational and practical nature of thus calling out the community seems to me the point most worth calling to your attention.

Nothing it seems to me can interest those who have been in social work more than this generous widespread proffer and performance gratis of work for the national well-being. Children's Year is one among many examples of it. It is distinctive in this however that the work called for required a more sustained effort than the series of "drives" prescribed by the Liberty Loan or the Food Administration work while at the same time it had more definiteness, was a more specific task than the work for Americanization or Health and Recreation.

Despite the relatively undramatic nature of the Children's Year program, although its appeal could only reach those with imagination enough to see the wisdom of prevention, it has won a large and interested following. Something like 16,000 committees now actively participate in the work of setting up better institutions for the discovery of defects in children and the removal of those defects. At first the imagination stirred by war was turned entirely toward the needs of the combatants. It was difficult to see the need for action to prevent the increased sickness and death and the lowered morale that had overtaken nations earlier in the contest. To save life and to build vigorous citizenship is a recognized peace-time occupation but war-time is traditionally supposed to bring things more desperately necessary to do. However, with the example of England before us we were able gradually to overcome the protests of the conservatives—the men and women who weighed the claims of child welfare against rolling bandages and collecting money for the combatants, and found child welfare wanting. At least we were able to answer the query, Why child welfare in wartime? in such a way that every month since Children's Year was announced in April, 1918, a new

body of volunteer service has been offered to the cause. Mothers of little children have written us in genuine appreciation of the fact that the government had expressed solicitude for their little ones. In growing numbers all over the country men and women have pressed the cause of the "normal" child. To review the existing organization over the whole country is most heartening. Virginia and Pennsylvania are now the only states not participating in Children's Year. In forty-six commonwealths of the nation, therefore, the challenge of Children's Year "to save 100,000 babies and give children a square deal" has been answered. In each one a more or less effective organization is now at work. Twenty-one states have county and unit committees; in Illinois there are 1,628, each reporting day-to-day efforts for the better health and better protection of childhood. Eighteen other states follow the same path with a progress only a little less rapid. A certain number must still be classed as weak sisters. Even these are slowly gathering strength; in one state where the state organization is weak, certain units are among those most conspicuous for successful work.

Although the financial backing for this program has nowhere been very munificent whatever money has been spent has been raised by the efforts of these defense organizations. The Departments of Child Welfare in Illinois and Massachusetts have had fairly liberal financial provision. Illinois has been enabled to spend \$21,404 in the seven months reported, a generous support given from a private fund, the Elizabeth McCormick Memorial Fund. Massachusetts has turned so energetically to the state officials and private benevolence that the State Committee has succeeded in having \$53,930 made available for Children's Year. In the more populous districts of several states, local governments, counties or cities, have given grants. Minnesota, for instance, reported \$11,300 given by counties. Some of the states are getting amazing results from modest state appropriations of \$5,000. California, Connecticut and Rhode Island are working on allowances as small as this. As a consequence there is little paid service. Sixteen states have some paid assistance, but the great majority of the day-to-day service has been a generous gift made from the spare time of the housewife and the money for the work has come largely from her scanty surplus. Specialists have also unstintingly lent their services and skill for the ends in view. Many hours daily doctors have weighed and measured little ones. Public health officers have given their own services and often put all of the

machinery of their office at the disposal of the Children's Year committees. The teacher, the school superintendent, the playground supervisor, the relief worker—in fact, all interested in constructive work for children have joined heartily and with continually increasing understanding, in the program for Children's Year. When the honor roll of Children's Year is being called not the least stirring part of this should be the names of those giving this unstinted service to children in war-time, a generous gift to their country.

The lesson of all this, it seems to me, is that progress can be greatly accelerated by the use of volunteer service. Where specialists gather together and formulate principles the nation profits, but unless specialists take a considerable time to explain their purposes and to organize the public in a democratic way to help carry out those purposes, results cannot be expected. Organization alone without a definite end in view is rather futile. Making a program alone without a wide and democratic organization through which to present it and set it in motion is equally wasteful. The Defense Councils and their outgrowth, the Community Councils, may not as yet be all that they were intended to be, but as an ideal they are sound, and the Children's Year has been particularly successful because it called for and got community action about a definite yet extended program whose general import went straight to the heart of the womanhood of the country. On the whole the program specialists have laid out for children has probably been better popularized in one year than it could have been in ten under other circumstances. Some 7,000,000 children under six years of age have been weighed and measured. Some 11,000,000 women have come to know about the close relationship of height and weight to the health of their children and a great step forward has been made in the whole program for preventive care of childhood.

Children's Year means this step forward in preventive medicine not because any new ideas have been developed but because the specialists' program has been promoted by the central government, by state governments, by national societies, with a zest and an unwonted and desirable use of the machinery of advertisement usually applied only to profit-getting enterprises. Because the Children's Year state chairmen have ingeniously used poster, handbill, dodger and tract, movie, public speaker, press, pulpit and school, the nation is like to profit in its future citizens as the good business man profits in his business through the use of like devices.

Let us take note for peace times!

The Chairman: I am sure we are greatly indebted to Dr. Peixotto for her remarks and for the work she has done in reaching the average woman. I think she is right in saying that it is now up to the experts to make use of these volunteers, but if I may, I will also add that it is up to the volunteer to be ready to be made use of and be quite subservient in her work to the expert, then the two can co-operate.

REPORT OF THE ELIZABETH McCORMICK MEMORIAL FUND ON THE PROGRAM OF THE CHILDREN'S YEAR IN ILLINOIS*

MRS. IRA COUCH WOOD, Director, Chicago

By a very fortunate arrangement the Elizabeth McCormick Memorial Fund has during the past year, financed the work of the Child Welfare Department of the Council of National Defense in Illinois. The work of the two organizations has been closely co-ordinated through the Director of the Memorial Fund acting as Chairman of the Child Welfare Department.

In starting this work for children in Illinois, the Trustees of the Elizabeth McCormick Memorial Fund and the Advisory Committee of the Child Welfare Department conceived it to be their province to carry on a movement for lay people, by lay people, with the professional sanction and advice of scientific men and women. We laid our plans to reach the average woman with the message of child welfare and the necessity for prenatal instruction. Last year when Dr. Truby King, of New Zealand, was with us, we asked him his receipt for the success of the work for children in New Zealand and he replied, "I made training in child care fashionable!" He also said, "I began at the top in New Zealand and worked down, having the most prominent and intelligent women in New Zealand to be the first to take the courses in child care. In America you began child welfare work at the bottom and it will be exceedingly difficult to make it work up." If we translate the word fashionable into the word popular it may perhaps be said to be the keynote of our program for the Children's Year. We sought to popularize and vitalize the movement for the reduction of infant mortality, and make it something more than an academic discussion in Illinois.

Our problem was to reach the people throughout the state and not merely to deal with the city of Chicago. In order to define our problem before we attempted to solve it, we sent out a questionnaire in February, 1918, covering different aspects of child care. We knew the replies would not be scientific in any sense, but they did show us very definitely the size

*Presented at the Session on Obstetrics, Dr. Edward P. Davis, Chairman.

of our problem in Illinois and made us realize fully that the seeds we might sow for child welfare would fall on more than the usual Biblical proportion of barren ground. In certain counties nothing whatever was done for the health or welfare of women and children, and the community was moreover absolutely complacent and satisfied with this condition. We found very few hospitals in the state where women were given care at maternity and few cities where there were Infant Welfare Stations, or any efforts made to give prenatal instruction. In the last eight months, however, we have succeeded in having child welfare chairmen appointed in 98 of our 102 counties; we have now 1,008 chairmen in Illinois working for the interests of children. Of course, they are of the usual human variety—enthusiastic, spasmodic or indifferent—but they are all workers to some extent and most of them are carrying on active propaganda to reduce the child death rate and undertaking practical work for the improvement of conditions surrounding child life. Some of this work is being carried on in a remarkably efficient way.

In addition to the organization of local committees throughout the state, we have used publicity to a large extent. Fortunately, as lay people we could use the press, as ethics forbids professional men and women to do. We feel that every penny of money put into educational publicity has been well worth while. We have succeeded in having a large number of articles published in the county and local papers as well as in the great city dailies. We have sent to the editors material ready for publication, and upon the advice of a publicity expert have sent with the information attractive pictures and cartoons which have been used to a really astonishing extent throughout the state. We have distributed literature on prenatal, infant and child care, not indiscriminately, but through centers established in schools, Council of Defense headquarters, neighborhood centers, churches, libraries, clubs, parent-teacher associations and organizations for public health nursing. We have all told sent out 1,800,000 pamphlets and circulars on child welfare and prenatal care during the last eight months.

The members of the department staff have given generously of their time to address meetings of all sorts and we have especially trained ten speakers to carry the message to all quarters of the state. In this work we have closely co-operated with the Speakers' Bureau of the Council of Defense with very good results. Our speakers have addressed 296 meetings, with audiences aggregating 40,000 people. We have co-

operated with the State Departments of Health and Public Welfare in the most harmonious way. Our women have assisted the former in its campaign for complete birth registration in the state, rendering very valuable service in this way; and numbers of subnormal and crippled children have been found by our committees and referred to these Departments.

We have definitely sought the co-operation of various organizations of women-clubs, parent-teacher associations, church societies, kindergarten associations and others. We have had, of course, in most cases the enthusiastic support of all the groups working with children; of the state and city tuberculosis associations, public health nurses, and in some cases the public health officials. In others, our work has acted as a stimulus to the indifference of certain individuals.

Far from finding we were imposing a piece of educational work on a group of unwilling women in the state, we have received the most astonishing support from the women, and sometimes the men, for a state educational campaign. One reason for this response was because we could give women a definite, concrete piece of work to do, such as the weighing and measuring of children under six years of age. It is always difficult for amateur and untrained workers to grasp an abstract program. In these weighing and measuring tests some of the government cards of course were filled out inaccurately, and many of them cannot be made the basis of any scientific tests, but the effort has stimulated great interest in the normal development of children. These tests have led fifty cities in Illinois to give their children under six complete physical examinations for the first time.

Perhaps the most valuable service the weighing and measuring tests have rendered, beyond the fact that they have given women something definite to do for children, has been to emphasize the menace of malnutrition, and to broaden the vision of the average parent as to the whole problem. It has been said that curiosity is a Divine attribute leading to human progress. Questions certainly show that interest has been aroused through the state. To the questions women are asking as to the care of the under-nourished child, we are endeavoring to supply the answer through the formation of child health centers, with the possibility not only of caring for the child, but of creating a center for the education of mothers, where prenatal advice may be given to the pregnant woman. Twelve cities in Illinois have started child health centers

already, with physicians and nurses in attendance and a body of lay people to support their efforts. Another interesting result of this year's campaign is the mothers' conferences that are springing up in the schools. In a number of cases groups of men and women in the state have asked that lectures on child care be given in the school centers. Local physicians and nurses have generously contributed their time to these conferences, making it possible to give prenatal instruction, outlines for child feeding and training in child care.

We hope to see some of our work crystallized in legislative action in the state for the benefit of children. We are urging adequate appropriations at this session of the legislature for the Division of Child Hygiene of the State Department of Health. The proposed section on Child Welfare in the Department of Public Welfare which is included in the administrative program for the coming year, is an indication of the increased interest in the state in this subject. We have a law providing for the possibility of a full-time health officer in rural townships and we are working to have this adopted throughout the state, and are urging at least one full-time public health nurse for every rural county and every community of 10,000 people.

* One great need in the state is nurses and physicians properly trained to give prenatal instruction to mothers and to give expert care to infants and children. We hope that the Chicago Pediatric Society, when the war is over, will undertake to hold a series of institutes for doctors and nurses in this state so that the ideals of the Children's Year may be the more quickly developed into practical programs. We are keenly alive to the necessity for introducing courses in child care and personal hygiene into all our educational institutions. We are seeking to have adequate courses of this kind adopted in our normal schools, in our high schools and colleges, and have encouraged the teaching of Little Mothers' Leagues in the public and private schools. We hope that one of the most definite contributions of the campaign of the Children's Year in Illinois may be the adoption by educational institutions of courses in child care.

The Elizabeth McCormick Memorial Fund will continue the work done under the Council of National Defense in Illinois after the latter goes out of existence with the declaration of peace, because we believe that the work begun in the Children's Year should never end, but should be continued with no loss of impetus into the future.

In conclusion, if I might venture in so distinguished an assembly to strike a purely humorous note, may I give you the slogan for the Children's Year, written by a seven year old boy of Springfield, Illinois? "This year it is everybody's *duty* to have a baby and save one."

MICHIGAN'S "CHILDREN'S YEAR SPECIAL"

MRS. INA J. N. PERKINS, Grand Rapids*

In the interests of better babies everywhere and as a help in saving Michigan's quota (2,808) of the 100,000 babies the "Children's Year" is to save, the Woman's Committee of the Michigan Division of the Council of National Defense ran a "Children's Year Special" for nearly a month over much of the interurban trackage of the state.

The project was made possible by the great generosity of the Grand Rapids, Grand Haven and Muskegon, Michigan Railway and the Detroit Urban Electric lines. The companies operating these interurban systems contributed use of cars, free transportation and unlimited service of the best quality.

The trip was originally planned to continue through six weeks, from October 1, 1918, to November 16, 1918, and called for stops at 65 places. When the Influenza epidemic began to assume serious proportions "Special" was called in, but when health conditions seemed to justify a continuation of the trip the car resumed its journey. The first part of the trip was covered in 13 days and included stops at 30 places. On the second trip it was necessary to rearrange and shorten the itinerary somewhat to avoid quarantined or danger territories. The second section of the trip was two weeks in duration. It was possible to make stops at 22 places. Stops varied in length from two hours in most cases to two days in a few instances.

Each company furnished a car that was placed entirely at the disposal of the manager of the trip, and every assistance was given to make equipment and arrangements suitable for the purposes of a traveling child welfare exhibit and health center.

The exterior of the car was gayly decorated with banners bearing the name of the Woman's Committee, Michigan Division, Council of National Defense, and announcing that "Uncle Sam wants you to visit this Car," "Bring Your Babies and Children to be Weighed and Measured," and giving the place and hour for the next stop. The inside

*Presented at the Session on Rural Communities, Dr. Dorothy Reed Men-denhall, Chairman.

of the car was divided into three sections; one part being used for an attractive exhibit of posters and other child welfare message bearing material; in the exhibit was included a table of recommended literature for children, a display of good and poor toys, a model layette and a "Don't Table," that attracted much attention. That it is still necessary to preach against pacifiers, long-necked nursing bottles, pickles, doughnuts, tea, coffee and sausage as well as other harmful things for children was evidenced by the frequently expressed astonishment of visitors. From one table of the exhibit compartment a variety of suitable mother and child care literature was intelligently distributed. In the second section of the car the babies and children brought for tests were undressed and dressed. A third compartment was fitted up as a model examination room and here hundreds of little people fulfilled Uncle Sam's request that they be weighed and measured.

In all cases some further examinations were made to discover tooth, adenoid, tonsil, glandular and prepuce conditions. When time and proper professional assistance permitted, even more complete examinations were made. The Children's Year record cards of the Federal Children's Bureau were used and the findings were about the same in all places, namely, that from 45 to 60 per cent of the babies and children examined were suffering from defects, most of which were preventable. The "Special" carried a staff of three professional workers, a manager and a trained nurse furnished by the Woman's Committee of the Council of National Defense and a physician provided by the State Board of Health.

Almost everywhere the "Special" drew big crowds of interested people and was genuinely helpful to individuals and communities. The success of the trip was due in most part to the loyal co-operation of the local committees of the Woman's Committee of the Council of National Defense. They arranged much of the advance publicity and so interested local physicians and nurses that many of them gave generously of time and strength to help the "Special's" staff with the tests and examinations.

Many incidents of the trip proved the worth-whileness of the venture. Through the visiting "Special" numbers of people received their first insight into child welfare work. In hundreds of individual cases helpful suggestions were appreciatively received. Some towns where little or no child welfare work was in progress decided to immediately undertake something in that line. All communities visited reported that the visit of the "Special" had stimulated interest in child welfare.

IV. LOOKING TOWARD THE FUTURE

WHAT THE CHILDREN'S BUREAU IS DOING AND PLANNING TO DO

ANNA E. RUDE, M. D., Children's Bureau, Washington, D. C.

The work that the Children's Bureau has been doing in war time and the work that it plans to do in the period of reconstruction is but an outgrowth of the work that it carried on in the previous six years of its existence. Perhaps, then, it may be well to give a few minutes to a brief review of that work.

The law that created the bureau in 1912 assigned to it the whole field of child welfare: "All matters pertaining to the welfare of children and child life among all classes of our people," as the text of the law says.

But Congress, when passing the law, gave the bureau an annual appropriation of only a little over \$25,000. For the first year or two, the staff consisted of only 15 persons to attack the whole problem of child welfare in this country. As the appropriation and the staff of the bureau have gradually increased the work has broadened. So far as the resources of the bureau have allowed, the aim has been from the first to do work along as many as possible of the important lines of the great subject of child welfare.

From the very beginning, the bureau has emphasized the enormous importance to the child of good prenatal and obstetrical care for the mother; one of the earliest popular bulletins issued was on prenatal care. A bulletin on maternal mortality called attention to the census figures on that subject—the strongest argument possible for better care of mothers. Members of the bureau staff have been consulted personally and by letter by many organizations wishing to establish prenatal work. Letters coming to the bureau from mothers and expectant mothers on isolated farms have revealed the urgent need of better care for mothers, babies and children in rural districts; during the past two years studies have been made in seven widely separated states in the Far West, Middle West and South, where women meet pregnancy and confinement and bring up their children far from doctors and nurses. The findings of these studies furnish proof of the enormous need for infant and maternal welfare work in rural districts.

It is especially for the woman on the lonely farm or in the small town that the series of popular pamphlets on the care of mother and

child has been issued by the bureau. The method has been to gather authoritative material (so far as possible material generally agreed upon by experts) and have this material so prepared that it is easily intelligible to the lay reader. Five hundred thousand copies of the pamphlet on Prenatal Care, 1,000,000 of that on Infant Care, 200,000 of that on Child Care and 200,000 of that on Milk, the Indispensable Food for Children, have been distributed.

The bureau has made studies of infant mortality in nine cities. Those studies with which this Association is, I know, familiar, trace the influence of the many social factors that affect the welfare of mother and child. A study, the field work of which has just been completed in Gary, Indiana, deals in the same way with the welfare of children of pre-school age and includes a study of the physical development of many young children.

The formal and statistical studies of the bureau have shown the necessity in city and country alike of such essential elements in a program for the protection of mothers and babies as these: Prenatal centers, prenatal work by public health nurses, infant welfare centers, infant welfare work by nurses, divisions of child hygiene in state and city departments of health.

But, as Miss Lathrop once said, there are many millions of persons in the United States who have never read a government report of a statistical study and who never will read one. To these persons the bureau must speak in some other way, if it wishes to report effectually the need of these safeguards for children and their mothers.

It has spoken through three campaigns—the Baby Weeks of 1916 and 1917 and the weighing and measuring test of 1918. In these campaigns it has worked with state and city departments of health, with the county medical societies of the American Medical Association, and with the many millions of women represented by the General Federation of Women's Clubs, and this year by the State Councils of National Defense.

These campaigns had a very definite goal—more centers for prenatal care and infant care, more public health nurses, and more divisions of child hygiene. In a democratic country it is only through popular conviction of the need for these that they can be established and maintained; these campaigns in which thousands of communities—for instance, over 2,000 in the first Baby Week—and probably millions

of persons took part have brought definite results: more nurses, more stations, more interest in training nurses, more divisions of child hygiene in states and cities.

An analysis of the enormous maternal mortality which this country suffers shows the largest factors in the loss of women in childbirth to be ignorance of the dangers connected with childbirth and the need of skilled care during pregnancy and at confinement.

There has recently been introduced in Congress a bill offering Federal aid for states undertaking work for the protection of maternity and infancy in rural districts. According to the provisions of this bill, an initial \$10,000 will be available to any state establishing a state board of maternity aid and infant hygiene. This board must consist of a representative of the state board of health, who shall be a physician; a representative of the nursing profession, who shall be a public health nurse; and a representative of the teaching profession, who shall be selected from the state university or the state college of agriculture. Plans must be submitted by this board to the Chief of the Children's Bureau and the Secretary of Labor and approved, before Federal funds in addition to the initial \$10,000 will be available for carrying on the work. Any state that evolves a suitable plan for furnishing medical and nursing care for mothers and babies and for providing instruction in the hygiene of maternity and infancy, through public health nursing, consultation centers, and university extension courses in rural districts, will receive from the Federal Government \$10,000 annually and in addition a sum in proportion to the rural population of the state, provided a like sum is appropriated by the state legislature for the work.

The protection of children from premature employment has been one of the chief concerns of the bureau. Studies have been made of conditions affecting children at work, and the bureau has consulted and co-operated with national and state associations and departments whose object is the protection of children from labor. When the first Federal child labor law was passed the duty of the enforcement of the law was entrusted to the Children's Bureau.

The Federal child labor law went into effect September 1, 1917, one year after its passage and after the establishment of a child labor board and wide publicity, that employers might have abundant time for readjustment and a clear understanding of the provisions of the law.

The statute prohibited the shipment in interstate or foreign commerce of the products of any manufacturing establishment in which within 30 days prior to the removal of the goods children under 14 years of age had been employed at all or children under 16 had been employed for more than 8 hours per day, or 6 days per week, or between the hours of 7 p. m. and 6 a. m. The same restriction applied to the shipment of the products of any mine or quarry in which children under 16 years of age had been employed. It is quite generally agreed that a good child labor law should be three-fold and should establish physical, educational and age minima which a child must reach before being allowed to become a wage earner. While the Federal law fixed no educational or physical standards, it was effective in returning to school many children under 14 years of age and in teaching parents and the public the need for adequate standards of fitness for work.

The law had been in operation for 273 days when a decision of the Supreme Court declared it unconstitutional, on the ground that the interstate commerce clause could not be invoked to prevent child labor within the states. This decision served to stimulate effort for another Federal child labor law. The belief would seem to be justified that Federal legislation is necessary if equal protection is to be afforded all children.

Brief studies of the effect of the operation of the Federal child labor law were made and investigations are now being made in order that reliable information may be obtained as to the number of children who at once returned to work when the law was declared unconstitutional.

On July 12, 1918, 39 days after the child labor law had been declared unconstitutional, the War Labor Policies Board agreed that in all war contracts should be inserted a clause providing that children should not be employed in the performance of any such contract in violation of the standards of the former child labor law. On July 19 the War Labor Policies Board directed that the existing machinery of the division of child labor of the Children's Bureau should be utilized by all departments of the Government in administering this clause, and the President assigned funds enabling the child labor division of the bureau to proceed with the inspections necessary to the enforcement of the clause.

Through its social service division the bureau has considered the problem of the child in need of special care—the neglected, the wayward or the handicapped child. The conditions surrounding mentally defective children who are not properly cared for and protected by the state have been the subjects of surveys. How dependent children are being cared for and the prevention of child dependency have been studied. Reports on the care and treatment of delinquent children have been published and a survey of juvenile courts is now under way.

The spread of information about birth registration has been one of the important tasks of the bureau; it has worked to this end in co-operation with the Bureau of the Census and with the General Federation of Women's Clubs. Co-operation with women's organizations for the betterment of the conditions surrounding children has been from the beginning an important part of the bureau's work, and this centered at first in work for complete birth registration. The first publication of the Children's Bureau was entitled "Birth Registration: An aid in protecting the lives and rights of children," and was prepared at the request of the General Federation of Women's Clubs. The co-operation from women's organizations was later extended to the nation-wide Baby Weeks of 1916 and 1917, the purpose of which was to make more generally available information about the care of babies and the conditions under which their chance of survival is best. During Children's Year, which began with the second year of the United States' participation in the war, through the Women's Committee of the Council of National Defense, the co-operation of organizations representing about eleven million women has been secured for a year-long effort to save 100,000 babies or one-third of our annual loss of children under five years of age.

The first endeavor of Children's Year was to make plain the need for better care of young children. As a means to this end a weighing and measuring test was inaugurated on April sixth, because the relation of weight to height is a fairly accurate index of a child's physical well-being. A record card giving the average weight and height of children up to sixteen years was issued in duplicate; nearly seven million of these cards have been distributed. It is estimated that in this way at least thirteen million parents have been reached.

A recreation drive was undertaken during the summer months for the purpose of increasing physical vigor and alertness. The providing of recreation under competent leadership or supervision was one of the principal aims of this undertaking, which is largely responsible for the establishing of extensive recreational work of a permanent nature, especially through the public schools.

The third, or "Back-to-School," drive of the Children's Year campaign which is now in progress is intended to bring home to parents the economic gain of keeping children in school and to return to school children who have been influenced by wartime wages to enter industry. With the cessation of war an added problem presents itself: the natural demobilization of workers on war contracts and the return of men from service will tend to put out of employment children who were employed during the war. These children should return to school. It is suggested that scholarship funds be established to keep needy children in school after the legal age for working is reached: The purpose of these scholarships in elementary and high schools is not only to keep children out of industry but also to give them at least two years of additional training beyond the compulsory school attendance age. It is hoped that this drive may result not only in returning thousands of children to school but also in leading toward higher standards of child labor and compulsory attendance laws.

As you all know, the Children's Year campaign has been one of the bureau's main wartime measures for the reduction of infant mortality. This campaign stressed the establishment of children's health centers and the maintaining of public health nurses as fundamental in any permanent welfare work. Upon the traveling public health nurse must we depend to overcome the isolation of the rural population. The reports of the large number of permanent health centers which have resulted from the Children's Year campaign as well as the increased number of public health nurses—even though the demand far exceeds the supply—have more than justified the undertaking.

In attempting to solve the important problem of permanent child welfare work, we must look to co-operation and standardization. The present awakened responsibility for the welfare of the children of the country affords infinite possibilities—to be realized through standardization of all methods and co-ordination of all existing organizations.

The Chairman: We all know how the Children's Bureau is turned to by all mothers of the country and what valuable work it is doing. I am going to interrupt the program at this time because I want Dr. Hastings, President of the American Public Health Association, who is here, to say something before he goes.

DR. CHARLES J. HASTINGS, TORONTO, ONTARIO

President of the American Public Health Association.

My interest in an organization of this kind and the work you are doing has been very much augmented as the different speakers have pointed out what has been done as a result of the war, and when I say that I say it from a national standpoint, because we must not forget that the infant or baby is no dearer to the parent today than it was before the war began; but what is most lacking of all is getting that information across to the mothers and getting it to them in a way that they can properly interpret it. Unfortunately, the knowledge that we possess in regard to preventable diseases and ways and means by which they can be controlled has been for the most part kept within the precincts of health departments, universities, laboratories and so on. It has never been translated as thoroughly as it should have been into a form that the man on the street and the woman in the humblest home could understand. We must democratize this knowledge in such a simple manner that the wayfaring man, though a fool, need not err therein. There is not a woman in our land who is not fond of her baby, who would not probably jeopardize her life for that baby. Is it likely then that she is going to willingly sacrifice it? No. In nine times out of ten it is the result of ignorance; it is the result of a lack of proper knowledge on her part. The fault lies with us. We cannot blame her any longer. We have got to take the blame. It is our duty to put this information across. We have been finding fault with legislators because they have not given us legislation strong enough to accomplish what we desired to accomplish. The fault is not with our legislators, but with ourselves that we have not educated the people. The legislators are there to give the people what they want, and if we educate the people up to the point that these conditions are preventable they will insist that they be prevented. When parents know that there are ways and means by which their babies can be saved not only suffering, but death, they will see to it that our legislators grant such legislation.

After all, we want to do a little introspection and find out where the blame belongs.

I appreciate the privilege of being here for a short time, and I hope to be with you this afternoon and enjoy some of this feast of reason and flow of soul.

WHAT THE DIVISIONS OF CHILD HYGIENE OF THE STATE DEPARTMENTS OF HEALTH ARE DOING

EUGENE R. KELLEY, *State Commissioner of Health, Massachusetts.*

I believe that Miss Besom has already given in more or less detail what we have been doing in Massachusetts, and it is sufficient for me to call attention to some of the salient features.

In the first place, we think of our existing division—the Division of Hygiene—which is particularly interested in child welfare and infant conservation. We have regularly three nurses in that division. At the outbreak of the war an emergency was created where intensive work was necessary in child welfare. Dr. McLaughlin, my predecessor, to whom the credit for our Massachusetts work chiefly belongs, worked out a co-operative partnership between the state health department and the Boston Metropolitan Chapter of the Red Cross, by which the Metropolitan Chapter contributed funds to keep eight nurses in the event we could get enough money to pay their expenses from the department's budget. A state-wide survey has been carried out of what is and what is not now existing in the way of child conservation agencies. As we went from community to community we urged agencies in the local fields to get together. We started with a large and somewhat ambitious program, but later postponed for a time work in such fields as juvenile delinquency and children of the higher age groups, in the interest of intensive work centered on the baby. Leaders in various phases of the child conservation movement were appointed on our "Child Conservation Committee" by the State Health Commissioner, to work in conjunction with the state health department, all working together as one unit.

We have surveyed two hundred and twenty cities and towns in the state which represent ninety-two per cent. of the population. As a result of the work we have raised \$65,000.00 for infant and child welfare work in the various cities and towns. There have been actually

employed 31 new nurses, with 15 authorized, but are not available under present conditions. Thirty-one child welfare stations of various types have been opened and eight prenatal clinics.

A word or two as to the results we have obtained in the state. Your President told me that she wanted me to bring out what I feel is the thing most lacking, the thing we have not done, in the few minutes which have been allotted to me to speak to you. It has been a subject that has been close in my mind for a number of years past, and I have come to the conclusion (I may be right or wrong) that the one great thing in which we have failed in the field of child welfare work is, that we have not interested the father. I see by the newspapers that our President last night referred to the importance of interesting the father. I would like to speak out here and give a few facts. We have got to recognize these facts as they exist. There is something the matter with the infant and child welfare problem when we cannot get the average masculine mind of the United States interested. One of these meetings shows it already. We need more public workers and more institutions than we have yet, but in addition to that, we need the man in the street; we need the average American citizen to see that this means something to him. In the past we put all interest on what we could do for the public. I think the war has shown us a way out. We should pay more attention to the national importance of the baby. I have had some chilly illustrations of that quite recently. Here are two specific instances that came to me. We are making arsphenamin as a cure for syphilis. Many rats are required for test purposes, and in the budget I prepared I put in \$2,500.00 for white rats. There was no trouble at all in making the average man see that we needed these rats, and at the same time, when it came to the budget for public health nurses I met with great difficulty. There is something intangible to the average male mind with regard to public welfare and child conservation work. If we are going to make the average man of the state or in the street feel there is something that concerns him and concerns the average taxpayer, and is not simply to create more jobs for different doctors and different nurses and faddists who are perfectly well meaning, but possibly slightly weak-minded individuals, we have got to take an entirely different view as to what the problem means. Dr. Hastings touched on the same thought in his remarks.

There is one thing we can hammer at constantly with a bright prospect of putting it over, and that is to get back to the "man power." The war has shown very definitely to the intelligent citizen that man power is extremely essential to a nation. I do not think it will be a difficult thing to translate in the interests of child conservation that same national need so that it will go home to the average citizen. First, that there is no source of man power except the human being. Next, that the three sources of increased man power in this country are immigration, the natural birth rate, and the saving of babies—those that are now dying. Next, in the past as a nation, we could afford to be more or less careless of preserving our surplus of infants to have adequate, potential man power, because we have always had that stream of immigration to rely upon, but future immigration will probably be less and less from now on. Also in the past we could afford to possibly conserve less infant life. I do not mean from a sentimental point of view, but from the standpoint of national efficiency, we could afford to neglect more or less the conservation of babies born, because the birth rate was a good safe margin above the infant death rate. That margin is going down all over the Caucasian world. It is not impossible now to have the average American citizen perceive that the conservation of infant life is a very vital thing to the nation. When we get the nation to see that I think many of our difficulties will be solved.

An interesting sidelight on all this is the New Zealand record. Some of us had the pleasure of having a protracted personal conversation with Dr. Truby King, of New Zealand, when he was going to England last winter, and he brought out that point. We asked him what he would set down as the principal reasons why the infant mortality rate was reduced in New Zealand to a greater extent than anywhere else in the world, and his reply was, first, the homogeneity of the population of English speaking people, and the ability to understand each other's thoughts. Second, the personal leadership of the movement. He gave much credit to Lord and Lady Plunkett. Third, that the reason why New Zealand had accomplished so much in infant welfare was that while it was a sparsely settled country, yet it was one of the most fertile countries in the world. He said they had the very pressing problem of immigration always threatening them, a type of immigration, which whether right or wrong, they did not want, viz.,

immigration of the yellow and brown races. They wanted to fill up their own country with their own stock. Everything in New Zealand, he said, hinges largely on that. He said they were facing a gradual decline in the native birth rate, therefore, it was less difficult in New Zealand to make everybody understand the importance of saving of every preventable death in the younger age groups, knowing that the man and woman power of the nation must be a very vital thing to the future of that nation. I feel that if we can get that idea into the father's mind we won't have any more of this sad lack of appreciation on the part of the average male and what we are striving for in the infant welfare movement.

In our Baby Week in Boston, instituted by the Children's Bureau, we had some successful meetings, but when the fathers were called to meet at special noon meetings only five males showed up in the audience.

THE PLANS OF THE UNITED STATES PUBLIC HEALTH SERVICE

TALIAFERRO CLARK, Surgeon, U. S. Public Health Service, Washington, D. C.

I believe that if we are to reach the understanding of the man of the street, as just mentioned by Dr. Kelley, we must do things in a practical way, otherwise educational effort will be lost. The tentative program of the Public Health Service for child conservation is intended as a step in this direction.

Hailing as I do from that section of the country where it has long been the custom to refer to certain events as having occurred either before or since the Civil War, I am readily prepared to agree with the statement made so frequently during this meeting that we are going to benefit in a number of ways by the war that has now so happily terminated, and I am also quite prepared to agree that the experiences of this war will teach us many useful lessons, not the least of which, in my opinion, is that of the value of co-ordinated action. I need not recall to you how the Allies struggled for nearly four years, each acting separately and independently in point and in time of attack. It was not until active work was co-ordinated under one great and masterly guidance that fruitful results were obtained.

There are so many propagandists, so many societies working individually on their own particular problems without reference to the work

of others of allied character, that public opinion is suffering from a serious attack of indigestion. This is largely due to the fact that each and all seem to be so centered on and wrapped up in the particular phase of life and work that they are specially engaged in that the other man's viewpoint is not taken into consideration. We accentuate too much our own desires and impressions and opinions, so much so in fact that the necessity is very apparent that the activities of all should be co-ordinated and directed to one common end and purpose.

We are probably one of the most wasteful people on earth. This is natural, strange as it may seem, because when our progenitors came to this country they found a land of plenty. The streams were teeming with fish, the woods were filled with game, and the fertile soil yielded abundant harvest almost without effort. The necessity for saving was non-existent and the habit of wastefulness has persisted to our generations which applies not only to things material, but also to effort, as manifested by duplication of work by the different volunteer and public agencies engaged in public health work. For example, we find in one community a nurse visiting a home representing those interested in tuberculosis, and the same home is visited by another nurse engaged in venereal disease control work, by another employed by infant welfare societies, by another for the purpose of imparting instructions in the prevention of malaria and so on to the infinite weariness and bewilderment of the heads of the household. Such wasteful expenditure of energy could be readily obviated through the proper co-ordination of the activities of these various organizations so that one nurse might have been employed in common who was qualified, by training and experience, to impart the necessary information concerning all of the things mentioned. It would be well if the health activities of recognized private agencies were directed along co-operative lines through some national agency such as the Public Health Service.

The United States Public Health Service is primarily interested in the health aspects of child conservation. The authority of the Service to exercise its functions in the direction indicated in the tentative program is ample. By the Act of 1893 the Service was vested with very broad powers of co-operation with State and local health organizations. In addition, under the provision of the Act of 1912, the Service was given the necessary authority to study and investigate the diseases of man and conditions influencing the propagation thereof, including sanitation, sew-

age and the pollution either directly or indirectly of navigable streams and lakes of the United States.

Furthermore, by executive order, date July 1, 1918, the President placed the supervision and control of the health and sanitation activities of the various executive bureaus under the United States Public Health Service for the duration of the war.

Finally, an act has just recently been approved creating a reserve in the United States Public Health Service which will enable the Service to commission persons of authority in particular phases of health work and utilize their services under national control to one common end.

The Surgeon General has found it very desirable and expedient to do so, and has prepared a national program of public health for the reconstruction period covering public health education, public health administration, policing streams, safeguarding water supplies, securing safe milk—in fact, all the great problems of health and sanitation, including the health of children.

Those of you who are aware of the great things that are advocated and being done for the conservation of the health of the children realize the futility of divorcing this problem from that of the general health problem of a community, including sanitation, and the impracticability of considering public health entirely from the standpoint of any particular age group, occupation, or environment. The public health officer cannot confine his activities to any one particular section of his jurisdiction or portion of the population under his administrative care to the neglect of the rest of the territory and population with any hope of being successful in protecting the health of even that class of the community to which he has devoted the larger part of his attention. In consonance with this idea a tentative program was drawn, embracing the things that are being done, the things that should be done and the things it is hoped will be done for the protection of the health of the children of the country, and a number of authorities on the subject of child conservation, several of whom are members of this Association, were called into conference by the Surgeon General for the purpose of criticism, suggestion, and amendment of the tentative program before its final adoption. Before this is done, however, another conference will be called for the revision of the amended tentative program in the hope that one may finally be forthcoming which may be adopted without reservation by the several agencies engaged in this particular form of work.

CHILD CONSERVATION

No program of child conservation will be satisfactory that does not take into consideration the different requirements of children at various age periods. In other words, such a program must include provisions for :

1. Safeguarding the health of expectant mothers.
2. Improving the character of the obstetrical and nursing care and lying-in facilities during child birth.
3. Securing the accurate registration of all births.
4. Controlling conditions harmful to the health of infants.
5. Supervising the health of the child and of his environment during the pre-school and school age.
6. Safeguarding the health of young children in industry.

A summary of the general character of the activities to be carried on under such a program is given herewith. Many of them are already being carried on by the Public Health Service; in practically all of these the Public Health Service is ready to continue and extend its operations in co-operation with Federal, State and local health authorities and with other recognized public and private organizations.

A.—General

1. Co-operation with health authorities, nursing and other agencies, to promote the employment of public health nurses to give instructions in general and personal hygiene in the homes and to make inspections for the presence of remediable defects and for the control of communicable diseases.
2. Co-operation with State and local health authorities and other agencies in studying the problems of malnutrition.
3. Co-operation with recognized agencies to secure better housing conditions, pure water supply, proper ventilation and adequate lavatory and toilet facilities.

B.—Prenatal Care

1. Co-operation with Children's Bureau and State and local health authorities and other agencies to devise measures for adequate medical supervision and instruction of expectant mothers and to secure the establishment of prenatal clinics.
2. Co-operation with health authorities and other agencies in demonstrations of public health nursing activities in connection with visiting and instructing expectant mothers in their homes.
3. Devising and promoting measures for regulating the employment and safeguarding the health of expectant mothers engaged in industries.

C.—Obstetrical Care.

1. Co-operation with State and local health authorities to provide adequate lying-in facilities and obstetrical and nursing attention during confinement.
2. Co-operation with recognized medical schools, nurses training schools and hospitals to provide for the training of midwives and obstetrical attendants.
3. Inauguration of steps to secure the general adoption of a model law relating to the practice of midwifery.

D.—Infants.

1. Co-operation with the U. S. Bureau of the Census, the State and local registrars of vital statistics, to secure the accurate registration of all births.
2. Co-operation with State and through the state with local health authorities and recognized public and private agencies to secure the establishment of infant welfare stations and to promote measures for the care of babies in the home.
3. Co-operation with health authorities and other agencies to promote the employment of public health nurses to instruct mothers in maternal nursing, artificial feeding and in the general care of infants.
4. Co-operation with the U. S. Department of Agriculture and State and local authorities to safeguard public milk supplies by the establishment and supervision of private and municipal pasteurization plants and by such other measures as may be indicated.
5. Co-operation with State and local health authorities and with organizations for the prevention of blindness to secure the enactment and enforcement of uniform laws to prevent blindness in the new-born.
6. Co-operation with State and local health authorities to promote an adequate system of sanitary supervision of foundling asylums, hospitals, day nurseries, industrial nurseries, kindergartens and other institutions and homes in which infants are cared for for remuneration.

E.—Children of Pre-School Age.

1. Action to insure recognition by State and local health authorities of the necessity of supervising the health of children of pre-school age and the emphasizing of the fact that such care should be regarded as a continuation of the work done for infants, with a similar organization, but somewhat expanded to meet the changed condition.
2. Co-operation with State and local health authorities to promote an adequate system of medical and sanitary supervision of foundling asylums, hospitals, day nurseries, industrial nurseries, kindergartens and other institutions and homes in which young children are cared for for remuneration.

F.—School Children.

1. Co-operation with the U. S. Bureau of Education and State and local health and educational authorities to secure the employment of school physicians and school nurses for the health supervision of school children. Such supervision should include:
 - (a) The detection and control of communicable diseases.
 - (b) The detection and correction of physical defects (including defects of sight and hearing).
 - (c) Practical instruction of children in general and personal hygiene, including proper food habits and the foods necessary for health and growth.
 - (d) Medical examination of every school child once a year and of children about to leave school.
 - (e) Mental examination of school children to determine and prescribe the most suitable treatment and training for children who are unable to profit by the usual courses of study.
 - (f) Supervision of the school environment, including recreation facilities to prevent and correct faulty seating, illumination, ventilation, heating and sanitation, and co-operation with parents in maintaining a sanitary home.
2. Co-operation with the U. S. Bureau of Education and with State and local educational authorities to promote physical education.
3. Co-operation with local health and educational authorities to secure clinical facilities for the treatment of minor ailments and the correction of physical defects (including dental care).
4. Co-operation with local health and educational authorities and other recognized agencies to secure the establishment of open air or special classes and schools for children suffering from extreme malnutrition, anaemia, cardiac diseases and tuberculosis.
5. Co-operation with State and local educational authorities and philanthropic agencies for the establishment of hot school lunches both in city and country schools.

G.—Children in Industries.

1. Co-operation of the U. S. Department of Labor in promulgation of a model child labor law based on physiological principles.
2. Thorough co-operation with recognized agencies to secure adequate medical supervision of children in industries.
3. Co-operation with the industrial hygiene unit of the U. S. Public Health Service to secure physical examination of children about to engage in industry and periodic examinations thereafter.

H.—Other Classes.

1. Through co-operation with recognized agencies to secure adequate institutional care and medical supervision of dependent, neglected, physically handicapped and feeble-minded children.

The program in question is quite ambitious and the subjects mentioned under each section constitute a problem themselves that must be worked out under a co-operative plan with existing public and private agencies in order to get the best results. Of course, any such program will have to be modified to meet local conditions.

The question now resolved itself into how to put into effect a program such as I have outlined.

1. Responsibility of the Public Health Service.

There should be established in the Bureau of the United States Public Health Service a Division of Child Hygiene, the proper function of which would be to study and investigate the problems of child hygiene, to co-operate with State Boards of Health in medical research and field studies and in administrative affairs relating to the health of infants and children, and to co-operate with the Bureau of Education, the Children's Bureau and other recognized agencies dealing with matters pertaining to the health conservation of children and mothers. Broadly, this is the platform of the Public Health Service. Whether a Division of Child Hygiene is established or not, the Service proposes to ask Congress for appropriations to carry on some, if not all, of the activities mentioned, a part of the funds to be expended on a fifty-fifty basis with the properly constituted State and local health organizations and a part in the solution of certain problems relating to health supervision of infants and children.

2. Co-operation with State and local Boards of Health.

So far as this program applies the Public Health Service must have the special co-operation of State and local health departments. In dealing with health problems one must not lose sight of the fact that the power to enforce measures of health control are vested in the State health organizations by the legislatures, and by them can be delegated to local organizations. If effective public health work is to be done Federal agencies on the one side and voluntary agencies on the other must support the health officials, otherwise much valuable effort will be expended in vain.

3. Role of the Association for Study and Prevention of Infant Mortality.

I feel that the desirable role of this association is that it should serve as a clearing house of co-operative work by the affiliated societies; that it should be the point from which measures can be started to create public sentiment in favor of such a program. For example, suppose any one of the affiliated societies desired to undertake a certain phase of child welfare work in a local community, a perfectly natural thing to do would be to unite with all the agencies in that community who are interested in this particular phase of work, and work in co-operation with the State and local board of health and through the latter with the United States Public Health Service if the State and local facilities and resources are not sufficient to carry it into effect.

The Chairman: Dr. Clark's program is one that we can certainly subscribe to and for which we should work in conjunction with him. If we do, we shall accomplish great things.

AMERICAN ASSOCIATION
FOR
STUDY and PREVENTION
OF
INFANT MORTALITY

NOW
The American Child Hygiene Association

TRANSACTIONS OF THE NINTH ANNUAL
MEETING

CHICAGO, DECEMBER 5-7, 1918

PART II—Proceedings of the Sessions on Eugenics,
Obstetrics and Pediatrics

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SESSION ON EUGENICS

Chairman, PROFESSOR ROSWELL H. JOHNSON, University of Pittsburgh.

ADEQUATE REPRODUCTION

CHAIRMAN'S ADDRESS

For any country at any given stage of advancement of its arts and of exhaustion of its resources there is an optimum number of inhabitants up to which the country can continue to increase its population without producing an undue pressure upon subsistence. Above this optimum the number is such as to lead to injurious poverty regardless of any improvement in distribution.

A well-ordered community will strive to reach this adjustment. It may do so by encouraging or discouraging emigration, or by raising or lowering the birth rate. On the other hand, general welfare demands a minimum death rate and a marriage rate limited only by considerations of the unfitness of the parents, so that neither of these should be modified for population considerations. Only the birth and migration rates may be modified for this purpose. There is no reason to believe that any large part of the world is so seriously short of population at the present time as to demand a rapid increase of population, certainly such is not the case in our own country.

But so far we have considered the population as a whole. When its individuals are evaluated, however, it is found to consist of persons of widely varying individual and social worth. Our population is made up of a large number of those of middling innate worth, with the proportion of persons above and below this mode constantly diminishing as the deviation from the average increases.

This is universally recognized for physical characteristics. As to the mental characteristics, however, which are vastly more important, there are many idealists who in the face of the biological impossibility of no variation still insist in innate mental equivalence. The evidence against these well-meaning idealists is too copious to be retailed here. (See Poponoe and Johnson's "Applied Eugenics"). Suffice it to say that it is no less convincing than manifold.

Let us confine our attention today to the mental abilities in the largest sense, for it is in this field that retrogression of the innate characteristics of the species is probably under way. The physical attributes need far less attention, since death is still quite sufficiently selective to prevent any serious retrogression. Nature will take care of physical evolution fairly well, but for the mind a eugenic program alone can save the day.

Since these differences in the value of the individual to society and to himself are now known to be in large part inherited, it becomes of great moment to know the relative birth rates of the population. Obviously racial progress depends on a disparity in the reproduction of these groups in one direction. If reproduction of the most inferior is prevented, as should be done, then the remainder must yield a higher birth rate. But in addition to that, the superior half should have a higher rate than the inferior half. Sprague finds 3.7 births are necessary to sustain a fixed population, whereas Dublin places it at 4. Hence we must expect more than 3.7 births from all superior women or we cannot have a progressive race and maintain our numbers. This rate of reproduction then constitutes adequate reproduction on the part of the superior half. Anything less is inadequate.

Are our superiors reproducing adequately? Without retailing here the details, the answer is decisively no. How then can they be led to do so? By a new attitude toward reproduction, and by the reconstruction of features of a society that makes for this inadequacy.

First, we need a reconstruction of education. The instincts of a woman should make the work of the mother a gratification. Let us not thwart this situation by an education that tends to alienate her from the home, as we are actually doing. The problem of developing the teaching of domestic science and mothercraft so that they will fill their proper role is a most urgent one.

Second, let us handle sex education more efficiently than we do. Its purpose should not be to make chaste celibates, but rather efficient mothers. Today we either teach nothing, leaving to the newspapers, the musical comedy and vaudeville unopposed their perennial task of discrediting marriage and parentage, or else we hurl a revolting mass of information on venereal disease and prostitution at our young girls before they are taught the real significance of sex and reproduction. But a better day dawns when we have such a won-

derful poem of life as Maeterlinck's "Betrothal" with which to steady our girls as they meet the knowledge of the pathology of sex.

Third, we need economic fair play so that income may be more proportionate to real worth. The ideal of equal incomes, so attractive to the inefficient, is peculiarly pernicious.

Fourth, taxation should be heavy on the excess portion of incomes, and very light on that which is effective in determining the number of children. We now exempt those with small incomes, and strike very hard the \$2,000 to \$6,000 incomes, a group from which children are much more desirable. Incomes over \$20,000, on the other hand are fair game for the tax collector for they are usually actually injurious to the recipients and their families.

Fifth, do not deprive the ignorant of the information and means of birth control, thus the disparity in the birth rate between them and the educated may be reduced.

But now let us pass to the direct attack. We must have a new attitude toward reproduction. Let us give honor where it is due, and withhold it from the slacker.

Are all our superior single women wholly to be excused for their celibate condition? I doubt it. Have not some allowed themselves to fall into narrow ruts where they make no new acquaintances and meet only a familiar round of boys and married men? Have not others unfortunately allowed themselves to drift into an inexcusable anti-social misanthropy that seriously damages their attitude toward men?

The superior married woman whose reproduction is inadequate—the woman with one, two or three births is, except in a few special cases pulling back on the wheels of progress. It is to her we wish to make a direct appeal. We have talked much of the nobility of women who gave sons to the risk of death, have we no word of appeal to superior women to give life to sons nor word of approval to the splendid women who take their share in the most momentous thing in all life? In this field are the archslackers. Such a woman particularly offends when her husband is highly mentally superior. If the inadequacy is not from her will but his, our condemnation shifts to him as also our honor to the adequate father.

Should this pair be able to live in many rooms and have servants to assist, our condemnation must be still more severe of the life slackers.

What do you think of the strong man who piles his load on the weak and heavily-laden?

There is, then, a racial noblesse oblige. Unfortunately it finds little recognition for there is abroad a spirit of misguided selfishness cloaking itself in fine phrases, "realizing one's capacities," "being true to one's self," "following one's bent." The modern superior celibate, heedless of the future, sets up these false gods. Woe to the nation which, like ours, finds its superior women "slacking on the job" of motherhood, as ours are doing.

DISCUSSION

Mrs. William Lowell Putnam, Boston: I have very little to add from a woman's point of view to what Professor Johnson has said. It is unnecessary for me to dwell on the importance of segregating the feeble-minded; we all know what a tremendous help that would be if we could only make our legislators realize it; this is certainly a suitable thing for a woman to work for. Then, of course, there is an immense amount of loss of potential life through the venereal diseases and in preventing this loss woman can help enormously.

Coming down to what Professor Johnson has said in regard to every day life and to having children, I think the blame lies much more with women than with men. I think there are comparatively few men who do not want to have children, but a good many women who, perhaps because of the fear of pain incident to childbirth, do not care to bear children; such women might just as well not bear them because if they did the children would not be virile; fortunately, however, there are not many women who are seriously affected in that way. There are some, of course, who are afraid of losing their lives, and not altogether unjustly, because the present provision for women in childbirth is wholly inadequate both before, during and after birth. It is quite our business to make such provision much better. One cause of the birth of few children is the lateness of marriage and this again is owing in a measure to the luxury in living. A man often hesitates to ask a woman to marry him unless he can give her all the comforts to which she has been accustomed at home. This is where the man's mother might have brought him up to the better knowledge of woman-kind, for I do not believe that women are afraid to marry men whom they love even though they may be comparatively poor. Then, also, the matter of the education of girls is very much at fault. We do not bring them up with the feeling that it is their duty to reproduce life. That is also true of men, but rather truer of women.

We often hear it said that women are purer-minded than men. I do not think it is true. I think it is one of the platitudes which look plausible, but it is not true. Women are unquestionably purer in life, but I do not think them any purer in heart than men; in fact, I am inclined to think they are not as pure, and I found my belief on this: The law of sex is the most fundamental law of life. You cannot get away from it, try as hard as you may. Nobody

is above sex except abnormal people, who do not count. Sex is the foundation of life. It runs through everything. Everybody, no matter how old or how young, is, to a certain extent, affected by sex. Each sex perfectly normally and perfectly properly wants to be what the other sex demands of it. Men have demanded purity of their women, but women have not demanded purity of their men. This is why I say that I do not think women are any purer-hearted, and perhaps not as pure-hearted, as men. Look at the number of men of far from blameless lives whom scheming mothers have been in the habit of encouraging their daughters to marry. There are many such women and many lives have been wrecked through such marriages. It seems to me that here lies a very fruitful field in eugenics, a very serious thing that women have in their hands to control. When it comes to the question of marriage, it should be made as certain as possible that both parties to the marriage are fit before the marriage is consummated. This thing lies in woman's hands and women have hitherto failed to keep these standards where they should be. If the women of the race undertake to make these standards what they should be, the race in the future will be far stronger and better, and I believe that no time has ever come to us that will be equal to the present for carrying out such standards. The whole world has been looking upon the matter of the prostitution of sex during this war as it never looked upon it before, and when the men come back from the front, having seen things which you and I can only dimly apprehend, they will be ready for a much purer and more faithful life sexually than they have ever been before and men and women together must bring it to pass. Should there be failure in this it will be through the fault of the women, for they hold this future in the hollow of their hands.

Dr. Julius Levy, Newark, New Jersey: I would like to have Professor Johnson or Mrs. Putnam tell us how we can determine who are superior men and women.

Professor Roswell H. Johnson, Pittsburgh (closing): In reply to the question of what constitutes superiority, there is no one more ready than I to admit the impossibility of knowing precisely who is superior. In a rough way, for the purpose of my address, education and general efficiency would suffice as indices of superiority.

With respect to birth control, we must all greatly deplore, as I have in this address, the abuse of birth control, but are we ready to deny the means of birth control altogether to ignorant women? Are we prepared to continue the attitude we now take toward the spreading of valuable information to these people? I should say, most certainly not. I do not see how sex and reproduction can be put on a sound basis if they are to be without any means of intelligent control. It is a matter of great interest to know what to do about birth control, but to turn back to the idea of complete suppression of birth control would be reactionary.

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THE DETERMINATION OF DISPUTED PARENTAGE AS A FACTOR IN REDUCING INFANT MORTALITY

ROSWELL H. JOHNSON, Pittsburgh.

While juries have been called upon to compare in court the features of children and alleged parents, the uncertainty of such superficial comparisons has prevented any important legal use of the determination of parentage. The most widely known of such instances have been in cases of contested wills or titles. These cases, while spectacular, represent only a small part of the very wide application that would be made of this method, were it possible unerringly to establish parentage in illegitimacy cases. At the present time, if an illegitimate mother sues an alleged father for the support of her child, the defense on his part is usually that some other person might have been the father of the child, and because of difficulty of rebutting this defense under the present methods, it has been very difficult to fasten the support of the child on the father. If it is possible to elaborate methods by which parentage can be surely determined, so that alleged parentage can be definitely proven or disproven, then the support of the child can be fastened upon the father in cases where he can be located and has the necessary income.

The admissibility of the child for the inspection¹ of the jury is now well established for children over two years of age, but the preponderance of decisions excludes this evidence for establishing resemblance below that age, on the ground that the child's features have not yet acquired maturity and permanence. In our present state of knowledge this rule can be little criticised, but it is evident that it is while the child is still under two years that it is most necessary that the parentage should be established so that the child shall be supported.

Since the objections of the court are solely based on the uncertainty of determination by mere inspection, there is every reason to believe that should a method be developed that would make the determination possible from birth onward, the courts would interpose no objection.

However, we have so far considered the admissibility of the child itself as an exhibit. There remains the question of the admissibility

of the opinion of persons as to the alleged resemblance. In two cases photographs³ have been admitted, but the courts have been very reluctant to admit the judgment of witnesses⁴ and the preponderance of the decisions is against their admission. Yet we have three cases in which there is clear discrimination as to the ability of witnesses to reach an opinion of value. I shall quote the language of the courts in these cases:

Clark vs. Bradstreet, 80 Main 454.

"The testimony of witnesses where they have no special skill or knowledge in such matters has never been admitted in the state (Maine)."

Eddy vs. Gray. 4 Allen 438.

"The evidence offered as to the supposed resemblance of the child to the defendant was properly rejected. It is not of the kind which comes within the rule in relation to the testimony of experts upon questions of science or skill or of knowledge acquired by some peculiar experience or education. The witness called did not profess to have any special skill upon the subject of inquiry."

Keniston vs. Rowe. 16 Maine 38.

"Witnesses who have had sight of the persons might be indefinitely multiplied, without affording any satisfactory ground of judgment for a jury. Witnesses except in some art, trade or profession requiring peculiar skill and science are not called to form comparisons and to testify to opinions arising from them."

It is quite evident therefore that the court has already laid the ground for real expert testimony on this subject when methods that yield reliable results shall have been elaborated. The reasons why the elaboration of such methods would be so desirable are the following:

First, the number of illegitimate children will be cut down, if the prospective father knows that his paternity can be detected and the support of the child fastened upon him. Second, the care of the child would be very much better and hence its mortality risk appreciably reduced. This we may conclude from the well-known contrast between the death rate of illegitimate children and legitimate children, most of which must be attributed to the better support of the latter class. Having, then, seen the great need for such a method, let us examine our knowledge of heredity to see whether such a method is feasible.

There are four distinct methods that might be employed, and while the method to be mentioned last is believed by the writer to be the method of greatest reliability, the first three methods to be mentioned will have some corroborative value, especially in giving more concrete

evidence to skeptical jurors in the first few years of the application of the method.

First, the alternative inheritance of many abnormalities. Davenport in his "Heredity in Relation to Eugenics" has a list of many abnormalities which are inherited alternately and in a more or less Mendelian manner. In those cases where there is present one of these abnormalities in both the suspected parent and the child, we have corroborative evidence, but this method alone can be of limited use only.

Second, more uniform application could be made of the alternative inheritance of certain human traits which are inherited in a more or less Mendelian fashion, such as hair, eye and skin color. Since there is always some color, this comparison is possible in all cases, in contrast to the first class where the abnormality is only occasionally present. Conclusive evidence is hardly to be expected, although the evidential value becomes greater where both parent and child had some one recessive characteristic. It is true that there is a court decision where evidence as to eye color^s was ruled out, and a similar one in respect to hair color, but it is evident that the judge's reason in each case was not that these traits were thought by him not to be inherited in some degree, but a justifiable fear lest this evidence alone might too greatly influence the jury, in view of the importance of reaching conclusions as to parentage only on the basis of many traits.

Third, the papillary ridges on the palm and sole. Prof. H. H. Wilder, of Smith College, and other workers have now well established that there is a large role of heredity in the determination of the patterns of these lines on the palm and sole. These are the lines so well known in the finger prints now so frequently taken for identification purposes. I can vouch for this because I have on the palm of one of my hands one peculiar feature of the palm pattern common to my mother, myself and my older son. The use of the palms and soles is decidedly superior to the class of evidence heretofore discussed, but since it does not lend itself as yet readily to statistical analysis, I wish to call your attention especially to the last method, the anthropometric.

Anthropometry, or the science of human measurements, offers us the main reliance because by taking one hundred measurements on the child, on the suspected parent, and on the known parent, if the other parent be known, it will be possible to establish an index of correlation which will run very much higher in the case of real parentage than

where there is no relation. The one hundred measurements to be taken should include a number on the ear for the reason that this organ is peculiarly unsuceptible to modifications and to change in its proportions during life. Where the ear has been pierced, the lobal characteristics should be rejected, and possibly also the amount of projection from the head should be rejected as having too much of the modification element. Head shape and facial features should be used for a large number of measurements because of their remarkable variability. The other measurements would be those where the measurement is primarily a skeletal one, little affected by the weight and health of the individual. Davenport has shown that different skeletal dimensions may be inherited independently.

There are two disturbing factors which should be recognized. One is the change in proportion between male and female. This is readily provided for by the use of correction factors which eliminate sex differences. A more disturbing element is change of proportion with age, but this again can be largely eliminated by the use of correction factors.

There remains now to discuss the feasibility of this method. In the first place a large number of measurements must first be made on parents and their children in order to establish norms and correction factors, and also to determine the amount of difference in the correlation indices where the parental relation exists and does not. An appropriation of \$35,000 could be depended upon to give results in two years.

The method of attack is well understood by competent students of heredity, and it merely requires the decision of some institution to undertake the investigation. The writer suggests that the Children's Bureau at Washington would be the best agency, but since the governmental initiative is sometimes difficult to invoke, it may be possible that we must look to the Carnegie Institute of Washington or the Rockefeller or the Sage foundations for the preliminary work.

After the methodology has been perfected, how shall the method be actually used? It is my belief that this work should not be done by private experts hired by one or the other of the litigants, the system by which expert witnesses are usually employed, but which is nearly universally disapproved by those who have given the matter attention. Better, let the court call upon the Disputed Parentage Division of the

Children's Bureau to make the determination and report to it, the Children's Bureau making an appropriate charge to the court for the services. By eliminating the danger of bias this will greatly increase the confidence of judges and juries in the decisions.

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³Photograph Was Admitted as Bearing on Resemblance.

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⁴Testimony of Witnesses

⁴State vs. Woodruff. 67 N. C. 89. "It allows all persons to testify to such identity or to such resemblance who have had an opportunity of seeing the persons, if but for an instant."

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⁵Evidence as to Eye Color

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A USE FOR THE VACANT CANTONMENT

ROSWELL H. JOHNSON

We are about to have left vacant quarters for the accommodation of vast armies, indeed, veritable cities housing up to 50,000 each. These establishments about to become vacant are, the most of them, planted in the country surrounded by farming land. They are for the most part in the South, where relatively little fuel need be burned and where the tilling of the fields may go on throughout the year.

It seems like the fulfillment of the dream of the eugenist who has been so eager to segregate the feeble-minded women of child-bearing age. Let us therefore ask the loan of these cantonments to the several states for this purpose.

The maintenance of these plants will, to be sure, require considerable appropriations, but not so great as some may fear for much of the food can be raised on the lands now used as drill grounds, and other productive work may be installed to keep nearly all occupied. The net cost is more than made up by the saving to those who have had the care of these inmates distributed as they have been.

What a calamity vacant buildings are when this need is so great!

SESSION ON OBSTETRICS

Chairman, EDWARD P. DAVIS, A. M., F. A. C. S.,

Professor of Obstetrics, Jefferson Medical College, Philadelphia

THE SPRINGS OF A NATION'S LIFE

CHAIRMAN'S ADDRESS

When the world is passing through a crisis of reorganization and nations are torn down and built anew, the individual fibre of a nation becomes of the greatest importance. The real test of strength is now to be made, and whatever balance may be achieved, the preservation of that balance and the hopes of the world will depend upon the individual citizens of each state. The coming generation then will decide the power and pulse of this nation in the great international competition which is inevitable. More than ever are the life and health of the infants of today the insurance and guarantee of national strength for the coming generation.

The effort to obtain for infants healthy grandparents, while the most desirable of accomplishments, is difficult. Only that well-balanced use of body and mind, and that restraint necessary for physical, mental and moral efficiency can solve this problem. With adult persons these same measures will insure sound parentage; economic conditions will be of great service in this latter regard.

To secure a healthy infant population, it is absolutely essential that the conditions of life be such that early marriage can be encouraged. A living wage, sanitary and comfortable means of dwelling, civic sanitation including a pure and reasonable food supply, and all those agencies which make for physical, mental and moral hygiene are of the utmost importance. A new responsibility is placed upon civic authorities and more than ever is there imperative need for civic righteousness in the administration of civic affairs. From the standpoint of efficiency only, the great corporations are realizing the necessity of caring for the individual worker. Genuine philanthropy reaches its highest and most intelligent expression in this accomplishment. Some corporations employ skilled medical service, construct hygienic dwellings, encourage insurance and educate in matters pertaining to health, and not only give

a living wage, but teach those who work with them and for them, how to live. Most of this never comes to the public eye, but no greater service is rendered to the employee nor to the cause of humanity.

In this period of readjustment of national affairs, labor and capital approach a critical period; unless labor can be reasonable, interested and intelligent, it may be sadly misled and harm result; unless capital can be considerate and patient there will be great difficulty in bringing about a healthy national life; but the American people has never yet failed to adjust itself to new conditions and there is every reason to believe that success will be the final outcome in the present instance.

No greater curse upon the nation in the care of its infant population could be devised than the presence of a large standing army. It is a fact familiar to all who have lived in Continental Europe, that marriage is forbidden to men of military age unless they possess a certain stipend. The result is indiscriminate immorality and in order to save its population the state is obliged to care for the mothers in hospitals and to rear the children in foundling asylums. The mortality percentage among infants so reared is notoriously high, and the effect produced upon pregnant and parturient women is most injurious. Whatever may be the military necessity of the future, the people of these United States should take warning, and under no circumstances saddle themselves with a large and permanent standing army.

At present the community idea, such as community systems of heating, water supply and cooking are attracting much attention, and those who urge these methods point to a considerable success. In Plato's Ideal Republic there were women selected by the state to care for its infants. In the current idea applied to the prevention of infant mortality in the social service of the present day, there is a suggestion of the state maternity service of the Ideal Republic. Any activity which will lighten the manual labor of the mother of the family, which will make the life of the family less irksome, more interesting and more happy, will directly protect our infant population. Should, however, the current idea be carried to the point where the maternal relationship is invaded and mother and child miss that interchange of love, which is the natural stimulus for each, the result upon our infant population would be disastrous.

But the crying need in the prevention of infant mortality is better obstetrics. It is true that in order to make improvement in obstetrics

possible, the economic and other factors to which reference has been made must be present, but it is also true that without better obstetrics these factors will be of little value.

The encouragement of early marriage in sound individuals is a step of primary importance, marriage among those physically unfit is to be discouraged and, if possible, forbidden. It may not yet be possible to require physical examination of man and woman before marriage, but certainly the need for such is evident.

Education of the laity, nurses and doctors in matters concerning the increase and care of the population is of paramount importance. The difference between prudery and honest pride in what is natural, and in itself beautiful, must be made evident. The medical profession in Europe and the United States has for years been spreading abroad among women concise statements concerning the first symptoms of cancer, a brief description in simple language of its symptoms has been posted in rooms frequented by women only, upon the Continent and in some places in this country. Why should not a similar brief, clear statement of symptoms of dangerous conditions arising in pregnant women be posted in rooms used only by women throughout the country? Why should not the attention of expectant mothers be called to the dangers of miscarriage and convulsions and hemorrhage occurring during pregnancy? One has only to look over the files of daily journals to find advertisements of drugs for producing abortion, and some of these advertisements are in so-called religious publications. It is greatly to the credit of some editors and owners that they absolutely banish from their periodicals all such material, but unfortunately this custom is not universal. In schools both boys and girls should be taught the essentials of animal and plant reproduction, the necessity for good health and the misery which may be brought upon offspring by disease and vice. This matter can be put so plainly, so reasonably and with such force by the analogy of nature's processes in the external world, that young persons are interested and early impressed.

The comparison of the physical condition of the armies that have just been in mortal combat in Europe, shows that the best developed and physically strong soldiers came from those countries where women were proud to bear children and unashamed to have the fact of pregnancy commonly known. There is room for improvement in the life of our country in this regard.

Much has been done to educate medical students and physicians for better obstetrics, but economic conditions and lack of hospital facilities have been such that doctors cannot afford to do, in a large private practice, the careful work accomplished in good hospitals. Human life has been relatively cheap. The half truth that labor is a physiological process, a statement more injurious than a lie, has caused the public to believe that pregnant and parturient women require little if any care. For a long time it was impossible for any physician to earn a living by practising obstetrics only as a specialty. Only those physicians who had teaching positions could afford to do this. Lack of plentiful facilities made the education of the student imperfect.

At present there has been great improvement in many states of the Union, license to practice is refused to those students who have not had a fair obstetric experience. The multiplication of hospitals, the opening of maternity wards, the fact that patients resort to hospitals for confinement, better knowledge of obstetrics and above all the recent developments in obstetric surgery, have been great advances, and yet today there are three great dangers which threaten the physical life of women in the child-bearing age, tuberculosis, cancer and parturition, and this condition is the result of the fact that in the so-called private practice of obstetrics, as indiscriminately carried on by the general practitioners, there is very much to be desired.

The modern obstetric trained nurse has saved the life of thousands of infants. So splendid is the profession of nursing that it is difficult to select one field more brilliant in results than another, but if life and health and happiness and joy of families are appreciated, then the well-trained obstetric nurse has won great achievements. The trained nurse has made the modern hospital a safe refuge for the poor mother. The antiseptic precautions taken in such hospitals have eliminated to a large extent the greatest dangers of parturition.

Great as have been the achievements of medical science in improving obstetric practice in recent years, such achievements would have been impossible without the maternity hospital. It is in the development of the maternity hospital and the diffusing of knowledge concerning its function that we must look for the most immediate improvement.

There is yet an important part to be played by the government of each individual state. In Pennsylvania the State Board of Medical

Licensure has refused to recognize in the first class, hospitals that have no facilities for the care of maternity cases and cannot give adequate instruction and practice to resident physicians. The result has been a wonderful change of heart and mind in many hospital trustees. Before this the pleas of the medical staff for maternity wards fell upon deaf ears, but when the State Board rated the hospitals and published their rating as deficient for the needs of the community, the trustees felt the force of public opinion and maternity wards were opened. The result of such action has been to encourage obstetric education and practice among physicians, and to cause in each large community one or two men to make a specialty of obstetrics. These men became the hospital chiefs in maternity departments, and have the facilities for practicing modern obstetric surgery.

The training in obstetric nursing is carried on with great success and the training of resident physicians is no less improved. Difficult cases transferred from inadequate private quarters are successfully treated. There can be no more important factor in the improvement in modern obstetrics than the development of such hospitals.

Maternity hospitals should contain a considerable number of beds devoted to pregnant patients only. Pre-natal care we recognize as most important in the interest of mother and child. Pregnant women who are ill require hospital care and life and health are saved in a surprisingly large percentage by such protection. In addition to good facilities for surgical operation, each maternity hospital should have a good nursery; here the nurses and mothers are taught the proper care of infants, and this knowledge spreads among the homes of patients and is highly contagious and of the greatest value. Maternity hospitals require a comparatively large number of private rooms, and many of these should be at the lowest possible price. This will enable persons of moderate means to have the care which they demand. In proportion to the needs of the community, the maternity hospital may have private rooms of a more or less elaborate character. A useful adjunct to the modern maternity hospital is found in motor ambulances and good roads, which permit the prompt transfer of complicated cases of confinement to the maternity hospital in time for successful delivery.

But what answer shall be made to the plea of the expectant mother, "I cannot go to the hospital for confinement because no one will care at home for my husband and children"? Social service

answers this question. The original midwife was the woman who stood between husband and wife in just such an emergency, cared for the mother and infant, provided food for the husband and other children, she was literally the midwife of the family. Under the supervision of social service workers such women might yet prove useful for this purpose, such an arrangement would encourage the mother to seek hospital care. If some reliable person could keep the home together in her absence, the last objection to hospital care would disappear.

In the United States we have no use for the midwife, we have an abundant medical profession in times of peace, but in many states hospitals are not sufficiently numerous to care for the population and facilities are such that it is difficult to educate, train and control midwives, and while foreigners bring and use them, they are, on the whole, a menace to the health of the population.

We find a relic of bygone days in the so-called out-patient practice in obstetrics in hospitals and dispensaries. We train medical students in medicine and surgery in wards of our hospitals under most favorable conditions and best possible appliances. Why should students of obstetrics be sent into filthy tenements to learn how to practice obstetrics properly? Why should not the student of surgery be sent to tenements to diagnosticate the difference between a fracture and a sprain, to open small abscesses and to close trivial wounds? Why should not students of medicine be sent to tenements to make the diagnosis of typhoid fever, appendicitis and pneumonia? When hospitals are sufficiently numerous to accommodate the population and medical students are taught in hospitals only, infant mortality will be considerably lessened and medical education greatly improved. The abandonment of out-patient practice in obstetrics must be immediately followed by social service work, whereby the family whose mother goes to the hospital is promptly and efficiently kept together.

Must all patients go to hospitals for confinement in the interest of the prevention of infant mortality? Those who are able and willing to provide hospital facilities in their homes certainly have the right to do so. Those physicians who are able and willing to install hospital facilities in private houses, to employ a sufficient number of assistants and nurses to maintain hospital technique, certainly have the right so to do. But under no less procedure can the interest of the infant be safeguarded as well in private as in the hospital.

Among the most recent measures of interest in the prevention of infant mortality are recognition of the value of prenatal care among parturient women; the campaign instituted by the army and navy against venereal disease and the fight against tuberculosis. No less important is the movement to do away with the use of alcohol. If all of these could be efficiently carried out, the result upon the infant population would be amazingly good.

But while one may build medical and philanthropic castles, not in the air, but in the future of our hopes, one must ask the question, what is the real reason for the neglect of infant life? What is the most potent factor producing infant mortality? Laying aside certain hereditary tendencies for which the individual is in no way responsible, we are confronted with the unfortunate fact that selfishness more than anything else is at the root of infant mortality. In decided contrast is seen the pitiful struggle of the poor mother to give her life and strength to protect her infant. Among those who have ample means of life, how little thought and attention is given to the infant life! During pregnancy the mother does other things first and whatever of health and strength is left is given to the unborn child: the demands of society's various fads and fancies, anything but simple recognition of the fact that the life within her demands much of her own.

It has required war to cause this nation to take economics seriously and a nation will save to kill when it will not save to preserve the lives of the unborn. The natural instinct of man and woman to shield that which is helpless must be saved from the canker of selfishness if infant life is to be appreciated. History has repeatedly shown that in proportion as a nation strayed in liberty and vice from its ideals, in that proportion did the springs of the nation's life become foul and the nation fall into decay.

You have possibly been among the hills and mountains where springs come pure and fresh from the rocks; in the rivulet and the brook the water continues its way until gaining in strength its volume becomes a stream, and the stream taking on new strength from other sources, becomes a river, and the river broadens and deepens to the sea, and so the current of a nation's life has origin in these little springs of being which issue from the rocks and channels of primitive human nature, whose origin is in the primal instinct of the human soul, and these little lives uniting into a people, flow on through the meadows of

prosperity, over the shoals and among the rocks of adversity, breaking at times through the mountains of opposition, until finally the great river of the nation's life joins the mighty sea of humanity. These little springs are fed by the rain and warmed by the sun from heaven, watched over by the stars at night, and shielded by the silent sentinels of the forest. The water is pure as crystal and clear as the sunlight, and so it is with the springs of a nation's life, unless their source can be in the primal instincts of humanity, in its great psychic and moral forces which distinguish man from brute, the springs of a nation's life will be devoid of power, wanting in body and lose themselves in the quicksands of an uncertain and selfish existence.

DISCUSSION

Dr. Joseph B. De Lee, Chicago: In the few remarks which I am about to make I will take as my text only the slogan that Dr. Davis has enunciated, "better obstetrics." That term comprises the whole subject.

No matter how much improvement we make in housing the community, in social service, and so forth, unless we are able to teach the public the necessity for better obstetrics and to get the mass of the people thoroughly acquainted with the needs of the child-bearing woman, we shall fail to produce any remarkable reduction in infant mortality. To me the subject of the prevention of deaths of children during pregnancy and labor can be summed up in the words, "better obstetrics." If we start to analyze the state of obstetric conditions we have to admit that while there has been some improvement in obstetric practice in the last twenty years, it has not been commensurate with the improvement in medical or in surgical practice. Dr. Grace Meigs Crowder reported the results of a very careful investigation of the United States Census reports, and she has shown that child-bearing is just as dangerous now as it has been within our memory, and that the function of child-bearing kills every year a number of women, second only in size to the number that are killed by tuberculosis. The captain of the men of death for women in the child-bearing age is tuberculosis, and next in authority is child-bearing, a very unfortunate state of affairs. But we should not be too discouraged because our statistics are not better and the results reported are not to be taken right off at their face value. We are reporting today more deaths than we did twenty years ago. The area of the United States from which reports of deaths are obtained used to be 35 per cent; it is now nearly 75 per cent. The number of deaths reported has increased and the accuracy of the reports has been improved, so that when we listen to statistics comparing today with yesterday we must never forget that fact. We are more honest today than we were years ago, and the reason of that honesty is that the public is beginning to take an interest in the doctors and what they are doing, and we do not have to hoodwink the public for our own safety. The doctors will place their cards upon the table, knowing that a sympathetic public will understand the situation. When I say that so large a number of women

die, it is more of a general statement, and its proper bearing should be evaluated.

Why has there not been the improvement in obstetrics that there has been in the treatment or prevention of typhoid fever or tuberculosis or of diphtheria? The fundamental reason is this: The public has not gotten the idea that child-bearing is a pathological function. Dr. Davis said the half truth is believed that child-bearing is a natural function and should proceed without danger to mother and child, and will proceed without danger to mother and child. Today, with the modern development of women and men, with the effects of the diseases, both social and otherwise, that affect the present generation through heredity, child-bearing is no longer a normal function. What do I mean by normal? That is capable of different definitions. What would be normal for the human animal may not be normal for the salmon. As I understand, the salmon after spawning dies. Once in a while a fish lives and gets another opportunity to spawn, but the mother salmon, fat with eggs crowds the small fresh water streams and bruised and battered, throws off the spawn, and farmers gather up the carcasses for fertilization. What is normal for the human is not normal for the salmon. Other animals suffer death and damage as the result of the function of propagation. The human animal also suffers death frequently, and almost invariably is injured as the result of labor. Therefore, when you ask what do I consider normal for the human, I am at a loss to reply. If we adopt the opinion that was held up to now, that child-bearing is a normal function, I have nothing more to say. If we close our eyes to the fact that child-bearing still has a mortality of one woman in one hundred and fifty to two hundred; that pregnancy has both mortality and morbidity; that a number of women are injured or damaged more or less permanently as the result of childbirth, namely, from 40 to 60 per cent, and if we add to that the fact that from 3 to 5 per cent or even 6 per cent of babies born die during delivery, and from 1 to 10 per cent of these babies are injured—if you include all that in our conception of what a normal function should be, again I am at a loss to answer it. My own opinion, however, is this: A woman that produces her kind should not die during the act, neither should she carry from it any permanent damage; nor should the baby die during the act, nor should it carry from the act of birth any permanent damage. If we view present conditions from that ideal standpoint, there is nobody present, I am convinced, that will take exception to my statement that at present child-bearing is distinctly a pathological function, because the minority of women and the minority of babies enjoy any such ideal conditions. If you have followed me thus far and grant what I have said, it will bring me back to the original statement that the public does not yet appreciate, nor will it be gotten to understand, that child-bearing is a pathological function. I do not say natural. Everything is natural. The salmon when it dies, dies a natural death after spawning. What is natural may be still very pathological, very abnormal.

Further, we have the economic situation. If the public were to believe that child-bearing is pathological a great many of the inconsistencies now being practiced would be obviated. For instance, the midwife would be elimi-

nated at once; only qualified physicians would be permitted to practice obstetrics. The necessity for women going to a hospital for this function would be as natural as it is now for them to go to a hospital to have a toe cut off or to have the appendix removed. On the other hand, physicians would be more inclined to adopt obstetrics as a specialty. If the general public takes the position that any doctor or any midwife can deliver a baby, that it is a perfectly natural function, just as natural as the function of breathing, and anybody without special training can care for it, we cannot expect to accomplish much improvement. On the other hand, if the public appreciates the fact that delivery is an act of pathological dignity, they will employ the highly developed physician, and this will react in another way. The better class of men will adopt obstetrics as a specialty, as a field in which their peculiar capabilities and their knowledge and their practical science will find an efficient field for operation. We come at once against the economic side. It is getting to be very expensive to have all the improvements in medicine, including obstetrics. Nowadays, childbirth and sickness are getting to be luxuries which only the well-to-do can afford and this change has been natural. It has been impossible to avoid it, and we doctors will have to devise some means, probably of the communistic nature, such as our essayist has mentioned, some means of bringing within the reach of the middle class women, whose income is of moderate size, all the benefits of modern science and art now prohibitively expensive.

A confinement case means more than an actual delivery. It means antenatal or prenatal observation; it means care of the baby for the first two or three weeks until the pediatrician steps in. He takes care of the baby during the next five or eight years of life, and when the time comes for an appendicitis operation the surgeon comes in, then the nose and throat specialist and the various others I won't take time to mention. The family will be paying doctors and hospitals all the money they have outside of that which is actually needed for bread and butter for the children.

The obscure case requires a medical man, a surgeon, a nose, throat, eye and ear man, a chest specialist, the pathological laboratory, an X-ray diagnosis, test meals, etc., and by the time the patient gets through with all these she has a diagnosis, to be sure, but she has no means of carrying out the treatment. We have got to have hospitals where patients can go with a small amount of outlay and receive the proper attention.

I disagree to an extent, not in principle, with our chairman on the necessity of out-departments in obstetrics. It is as yet, and will be for the next forty or a hundred years, necessary to continue to deliver a large number of women at their own homes; the number of babies that are going to be born will be larger than the number of hospitals which we are going to be able to erect, and furthermore, the number of babies to be born will require so much time that we will not have enough doctors to give them individual care. Again, our democratic country does not yet carry socialistic principles so far that we can extend to a very large number the needed care which they ought to have. I feel that for the next fifty or one hundred years a large number of women

will still have to be confined in their homes. For them, the midwife will have to be retained in spite of anything I do or hope to do to the contrary, and in order to obviate this evil, I believe the out-maternity connected with hospitals will continue to bring real service to these women. Since we cannot get them to go to the hospitals, we must educate doctors to take care of women amid the surroundings in which babies have to be born. Since we have to educate doctors, there is no better way than to educate them under the circumstances in which they have to practise.

My experience with an out-department of obstetrics comprises thirty thousand cases; that does not mean I delivered that many cases, but an institution with which I am closely connected has handled thirty thousand cases with most gratifying success. The out-department teaches the student more than the taking care of the woman or women at their own homes. It gives them breadth of vision and accuracy in attention to detail and self-reliance which makes them vastly superior men when they accept service in hospitals and they acquire a sense of assurance that they can handle complications at home. I have recommended at the Northwestern University Medical School that some of the students be given actual teaching of bedside medicine in the homes. A great many people have to be sick and taken care of at home even yet, and the out-clinic in teaching men how to handle these cases at home would be a valuable adjunct to a hospital. The necessity for the reduction of infant mortality in obstetrics will be completely exemplified by the statistics of hospitals which Dr. Holmes is going to give in his paper. I know in some of the hospitals with which I am connected there is too large an infant mortality, and the reason for that is very plain to us. Men have not had the education in obstetrics they should have. A good obstetrician does not lose many babies. The improvement is in spots. The general mortality among the new-born babies is still inordinately high, and in a great many cases the family has complained directly or indirectly to the hospital management, and an answer has had to be given to this effect: "You employed that physician; you knew who he was, and that is all there is to it." Then the reply comes, "We could not afford a better doctor." That brings us back to the economic question again, and that can only be solved in getting patients to go to the hospital. Prenatal care, one of the methods of educating the public that Dr. Davis has recommended, I wish to second heartily, instruction of the women in what they should avoid during pregnancy and instructions as to the care of their bodies during pregnancy. Even among intelligent women I find a great tendency to neglect regularity of their visits for blood pressure and the sending of urine, especially if they have had one or two babies. If we can in a campaign of education get them to see the importance of it, we will be able to score great success.

The effect of syphilis and other venereal diseases, of alcohol, and the protection of women engaged in industrial pursuits, is entirely too large a subject for me to more than mention.

Dr. Davis: One of the privileges of friendship is to suggest points of difference. I know that Dr. De Lee approves of out-patient practice, and that is the

reason I said what I did in my address. If everybody did as well as he does the objections would be reduced to a minimum.

I think it well at this stage of our program to have a simple concise statement of what comprises good care of a baby in a private house, and therefore I make no apology for introducing and asking Miss F. E. Biswanger, of Philadelphia, to read a paper entitled "The Home Care of the Infant."

THE HOME CARE OF THE INFANT

MISS F. E. BISWANGER, R. N., Philadelphia

Although infants may seem alike and while the essentials of their care are the same, there is no fixed rule for each, and the characteristics of each must be carefully observed. From the very first absolute cleanliness and thoroughness are necessary. At birth the infant's mouth and eyes should be cleansed with boric acid solution. The child turned upon its right side so that its heart valve may properly close and the child should be thoroughly but gently rubbed with warm olive oil.

A warm sponge bath and the clothing of the infant in a woolen abdominal band, woolen shirt, diaper and flannel slip will make it comfortable and it will rest and sleep. The new-born child should not be disturbed by friends or relatives.

The secret of its comfort in its food and sleep lies in absolute regularity and freedom from disturbances. For good digestion the infant's mouth should be gently but thoroughly cleansed with boric acid solution before feeding. Water in addition to its food should be given at regular intervals, by the use of a bottle and rubber nipple. This teaches the child to take the bottle and should it be unable to nurse, it can much more easily be fed. An empty bottle or so called "comforter" upon which the child constantly sucks, is an abomination. It produces infection of the child's mouth and tends to deform the mouth and jaw.

While admiring grandmothers and aunts must be treated courteously and kindly, they should not be allowed to interfere in the routine of the child's life by taking it up and interrupting it at all times. Infants rarely cry without a reason if they are kept clean, warm and well fed. If the child is constantly picked up it will learn to cry for that purpose.

It is usually thought that the spring baby is fortunate in having mild weather for its early introduction to out-door life, but the fall and winter baby should not be kept in-doors, but at six weeks may be warmly dressed and allowed to sleep in its crib or coach in a room

with open windows and shut doors, protected from strong wind or draughts. This should be upon the sunny side of the house and such daily airing is much safer and better than to take the child out under all conditions. In extremely hot weather the infant may wear the abdominal band and diaper only, other clothing being added so soon as the weather becomes cooler.

What a nursing mother perfectly digests will furnish good food for her infant, but unquestionably those articles of food which disagree with the mother, produce colic in the child. To furnish an abundant supply of food for the nursing child the mother may use cereals, especially cornmeal, cooked fruits, vegetables, milk and cocoa, with abundance of good drinking water.

Every effort must be made to favor the nursing of the infant. In cases where the first milk is too fat and disagrees it may be removed by the breast pump with very gentle massage, and the child given the less fat milk which comes after. Where the milk is thin and deficient, the attention of the physician must be called to this fact and under his supervision suitable diet and perhaps tonics may be used.

Scrupulous asepsis in the care of the nipples and the use of a supporting breast bandage with aseptic dressing over the nipples are essential. If the nurse has the opportunity she should encourage pregnant women to prepare the nipples for nursing and to so adjust their clothing that there is no obstacle to the full development of the breasts.

The first essential in artificial feeding is the cleanest and best milk available, the second essential, minute and written directions from the physician, and on the part of the nurse, the accurate measurement of the different ingredients of the child's bottle and the accurate carrying out of the physician's directions. When the child is thin the mother often complains that its food seems so dilute and urges that more cream be added. It must be explained to her that what the child digests and not what may be given to it, does it good. In thin infants much can be done by massage once or twice daily after bathing, with two parts olive oil and one part alcohol; a teaspoonful of the oil will be absorbed in this way at a single rubbing.

Close watching of the child to see that its food is digested and accurate weighing at regular intervals are essential. With bottles the use of brush and cold water to remove milk, filling the bottles with water and boiling them for twenty minutes in a covered boiler, will

sterilize them. Rubber nipples may be boiled for five minutes in a separate pan. No utensil used for the preparation of milk should be used for any other purpose. After use the bottles should be carefully washed, filled with water and set aside to be boiled on the following day. The rubber nipple after washing is kept in a solution of boric acid; glass jars are especially useful for keeping rubber nipples and small squares of soft linen for cleansing the child's mouth. Small heaters by gas or electricity for heating the child's bottle at night are most convenient.

A long baby may be a thin baby. A teething baby is often colicky and these facts should occasion no anxiety. At two or three months the infant sleeps less and should have its regular play time in the afternoon when its limbs should be free to stretch and move vigorously in all directions. At this time the child can be taught to amuse itself.

The care of an infant requires patience, cheerfulness and a strong affection for children, otherwise the disturbance of the night's rest if the child is not well becomes very trying.

At seven or eight months, the infant may play as much as it can upon a bed or crib or on a blanket on the floor. It may pull itself up, if strong enough.

In difficult teething the use of solutions prescribed by the physician for the gums may be helpful. Gently but firmly rubbing the gums with sterile linen dipped in sterile ice water or sterile warm water, may help considerably. No drugs should be administered without the physician's order. Ivory or rubber toys, free from paint and kept scrupulously clean are good for the child to bite upon.

In increasing the infant's food, orange or prune juice, bread and milk or cereals in very small quantities as directed by the physician, are best. An infant will soon drink from a cup and the bottle should be reserved for bed time.

For the quick relief of abdominal pain from colic, nothing is so good as an irrigation of the child's bowel with warm boiled water. For this the infant should lie upon the left side, the water flowing very slowly and gently into the bowel, and the rubber tube should be inserted as high as it will go. So soon as the return flow commences the child is relieved. Beyond soda mint or peppermint, nothing should be given by mouth for colic except on physician's order. The old custom of raising the child over the shoulder will often help it to dis-

lodge gas. To prevent colic the infant may sleep upon its abdomen upon a hot water bag partly filled with warm water. Many a quiet night for mother, nurse and baby can be secured by this simple means.

A rubber cloth over the diaper is an abomination as it is exceedingly unclean and causes chafing. Occasionally in traveling something of the sort must be used, but for as short a time as possible. The infant can be trained in its habits remarkably early in life.

One cannot too strongly insist upon the fact that the child's education begins at its birth. If the nurse is regular in its care, firm in not allowing visitors to disturb the child, gentle, kind and clean with the infant, the results are surprisingly good. It is needless to say that the infant's nurse must herself be absolutely clean.

The infant should have its hours of reception, usually in the afternoon, and parents and visitors can enjoy the child to their heart's content. This simple arrangement does much to lessen the irritation which relatives sometimes feel if they are not allowed to disturb the child at will. It is the beginning of the child's social life and this may well be instituted while an infant.

Infants are often put to sleep in any sort of room which happens to be convenient, but the infant's bedroom should be on the sunny side of the house in winter, with open fireplace, if possible. Whenever it can be done, the child should be bathed before an open fire, while the nurse and child may be surrounded by a screen if room is draughty. The open fireplace is the best of ventilators. If there is abundant room the infant may have its nap by day in a different room from that in which it sleeps at night. It must be remembered in using the open fire in a nursery, that sparks can fly a long distance and therefore that the infant and its crib must be protected by a screen before the fire.

I make no excuse for presenting before this section of the society these simple facts, but experience has shown me that most of the illnesses to which infants are subject come from disregarding these things.

THE CITY NURSE AS AN AGENT FOR THE PREVENTION OF INFANT MORTALITY

HARRIET L. HARTLEY, M. D., Philadelphia, Pa.

The City Nurse in Philadelphia is a Public Health Nurse employed by the city to carry out an educational propaganda for the prevention of infant mortality. Philadelphia has been able to boast a fairly uniform force of sixty of these most useful workers for the past year and a half; the force previous to that time was only twenty-eight, therefore the work is comparatively young and this accounts somewhat for the unenviable place the city took in 1917 as the fourth highest, large city in the United States in its infant mortality. The city can hardly look for improvement in 1918, as it experienced in that year an intensely cold winter associated with a coal famine, and a summer which saw the temperature rise to 106 degrees, while in October, usually one of the healthiest months of the year, an epidemic carried off 12,000 of the population in a little over five weeks. The week ending October 19, 1918, saw 382 babies under two years of age die of epidemic influenza and pneumonia while the corresponding week of 1917 saw no deaths from epidemic influenza and only twenty-four from pneumonia. At first it was thought these epidemic diseases did not attack the little ones, but the very tiny children were so neglected in the general disorder of things that they easily fell prey to disease.

The year has also brought many changes in the nursing force. Sometimes it has been impossible to keep the full quota of sixty nurses because so many joined the army of the Red Cross or entered more remunerative fields. It has been possible to secure very few nurses who have had any previous training in public health work, and during the epidemic the shortage of nurses made it necessary for us to abandon child hygiene teaching and allow the nurses who were not sick themselves to help out in the emergency hospitals.

Great numbers of people have come into the city in the past year to take up employment in the war industrial plants. As no new houses have been built, these workers have made the already crowded poor quarters scenes of extreme congestion. Milk has soared high in price and the baby gets less and very often a poorer quality.

Some authorities think that more mothers have left the home to work in the industrial plants, but the writer has not been able to prove this statement in reference to Philadelphia. With the cessation of the war and a return to normal conditions better results are looked for and the city nurse, whose numbers will probably be increased, is going to play a leading role in bringing about this change.

In the matter of determining with some degree of accuracy the health of a given district or locality, we have no better nor more intelligent surveyor than the city nurse. Her experience has brought her in contact with all kinds and conditions of men; her method of approach to the keeper of the home, usually the mother, is one which breeds friendliness and confidence; and an understanding of the true condition of the home and its inmates is arrived at from a standard viewpoint with a minimum waste of time. The city nurse with her general training as a nurse knows the earmarks of disease. As public health nurse she readily recognizes poverty, destitution and alcoholism. She can judge whether the family income is large enough or is expended in such a way as to insure the proper amount of health and comfort to the family. She can intelligently observe the care of the food, the refrigerator, utensils, etc., which either intimately or remotely affect the health of the baby. Here also she brings into use her knowledge of ventilation and determines whether the baby gets the proper amount of fresh air to guard it against respiratory disease. Her connection with the Board of Health makes her an authorized sanitary inspector and her general knowledge of the principles of housing and sanitation makes her a good judge of the conditions surrounding the young infant.

While birth registration may not appear to have anything to do with the health of the child, a high birth registration in a community certainly does help the infant mortality rate, and the nurse, gaining the confidence of the mother during the prenatal period, can by suggestion, convince the mother that she is protecting her child's future by legally registering its birth. As a result the mother may make life a little strenuous for an indifferent doctor, or a lazy midwife, but she makes sure that her child's birth is registered.

The need for more work in this line was again made known in the first draft of men between eighteen and forty-five years of age. Twenty-five per cent of the men who made application for birth certificates in the Division of Vital Statistics could find no record of

their birth. Surveys in the course of the work of the division in two wards of Philadelphia in 1918, while not making a point of birth registration, accidentally discovered quite a number of unregistered births for the year. A special survey for such data would probably cause an increase in the birth rate of the city.

The care of the baby brother or sister so often falls to the lot of the untrained girl, that it has been found necessary to make the care of the baby part of the school education of the girl. The fundamental principles are instilled, while the girl is young and fit her for these duties later in life. At this very susceptible age, the uniform of the trained nurse handicaps a lay teacher, for almost all girls, on first introduction to the society of a trained nurse, entertain hopes of some day following that profession, and so become ready listeners to the words of the nurse. The nurse from her training is so well acquainted with the needs of the baby that she can reduce its care to a simple art which the pupil readily understands; her knowledge of the environment and habits of her young student makes her able to interpret to the mother in the home, through the child in the school, many of the problems of the mother, especially if she be a mother who does not speak English.

In prenatal work the city nurse has no peer. The expectant mother is much more apt to confide in the nurse who gives advice about babies than she is any other type of health worker. The nurse often learns of the pregnancy early in its history, becomes the mother's friend and confidant and leads her in the direction she should go. If the woman has not identified herself with some hospital, clinic or private doctor, the nurse can direct her to a health center where she can be examined. With the aid of a doctor to make the physical examinations and advice in cases of digression from the normal the nurse can, after being properly instructed, make routine urine analysis and take record of the blood pressure. A woman doctor in the health centers is a great help to the nurse, for so many women educated to the point of coming for an examination, refuse to be examined when confronted by a man and much of the work of the nurse is undone.

Pregnant women often require some material aid or assistance in carrying the burden of small children. The nurse, with her intimate knowledge of relief agencies, knows just where to apply for this help.

The results of the nurse's effort in the education of women in the care of the breasts and the advantages of breast feeding are rather well shown in a series of 1,872 babies born in 1917 of mothers who had some prenatal care by city nurses. The end of the first month of life saw 1,814 breast fed. Allowing for the death rate for the first month of life, almost 100 per cent were breast fed at the end of the first month.

Up to the advent of the epidemic it looked as though the prenatal cases registered in 1918 would have just as good a record for breast-fed babies. After the storm of the epidemic had passed the nurses made a survey of the prenatal cases registered with the department September 21, 1918, when the epidemic first proved itself to be an epidemic and it was found that out of 1,017 registered cases 365 had been delivered normally, that 307 had contracted epidemic influenza and 87 pneumonia. In these 394 cases there were 40 maternal deaths; 24 due to influenza and 16 to pneumonia. Nine of the 16 dying from pneumonia did not abort. In 5 cases a viable child was born and both mother and child died. In two cases the mother died and the child lived. Among the influenza cases also there were 32 abortions. Owing to the extra drain on so many maternal cases, both from disease and household conditions, many of our present prenatal cases will probably be without breast milk when the babies come.

The city nurse is a wonderful factor in the adjusting of the newborn infant to its complex environment. She is especially valuable to the woman with her first baby. A little teaching by the nurse can do much to direct the mother in regard to bathing and clothing her infant and giving it a proper amount of rest and exercise; and if the mother has to enter the mysterious realm of artificial feeding, the nurse is best equipped to interpret the doctor's orders and show the mother the way. Of the first 5,309 infants registered in the Division of Child Hygiene in 1918, it was found that 4,411 were breast fed at six months of age. It seems probable that this large number of breast-fed babies was due to the words of the nurse.

The nurse often sees the first symptoms of ill health and directs the mother to the proper place for the immediate remedy of the condition. It is probable that a great deal of the success in the prevention of infant mortality lies in early attention to ill health. If mothers could only be made to understand how quickly the little ailment may

develop into a tide which is impossible to turn, the infant mortality picture would be different. Most of the nurse's teaching is best done in the home, where the phases of the life of the mother and child can be observed, but often a little group of mothers in a health clinic will be stimulated by a feeling of competition, and a desire to learn new methods is awakened.

In the course of her duties as instructor to the mother in the care of the infant, the nurse becomes the counsellor for the well-being of the little child between infancy and school age. She can remove much of the prejudice against vaccination and frequently change the mother's mind as to the necessity for these children contracting contagious disease; she can direct the mother in quarantine measures and the protection of the uninfected children of the family. She can suspect the presence of adenoids and enlarged tonsils and show the mother where to go to have these and many other defects of this period of life remedied. She realizes that the child needs pure milk, fresh air and play, and shows the mother how to obtain them.

The city nurse knows that the hope of tomorrow rests on the baby of today and she brings her education, her training and her position to battle with ignorance, indifference, disease, vice and poverty.

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CONSERVATION OF LIFE OF THE UNBORN AND NEWLY-BORN CHILD

RUDOLPH W. HOLMES, M. D., Chicago

Probably there never has been a period in the world's history when all the factors correlated to the conservation of life are so essential as now. With the enormous loss, amounting to millions of lives of men, women and children, due directly and indirectly to the war, and the concomitant reduction in births, it is vital that every effort shall be aroused that an increased security of life, before and after birth, shall be engendered. Much has been done these last years toward securing a prolongation of life: in fact, within the past generation life expectancy has been increased over a decade. The beneficences of medical sciences have brought this about—improved housing, sanitation, ventilation, rational adoption of rules of hygiene, and preventive medicine have each had their large share in making this realization possible. Within the sphere of its influence, the various correlated factors dealing with infant welfare have shown a marked reduction in the mortality of the first years of life and yet these influences have been so circumscribed in this country that our infant mortality is about sixteenth in the list of civilized nations. I shall assume that the obstetric child includes the period of pregnancy and the two weeks post partum, for it is within these two weeks that the trauma of birth and diseases incident to pregnancy will largely develop and determine the lethal outcome. So far as I may adduce opinions based upon figures I shall present, there has been little or no diminution of mortality of the obstetric child the past nearly hundred years, in *maternity hospitals*. These figures, I am sure, are a reflection of the conditions obtaining in private practice—with this difference. It is *prima facie* evident that maternities have an influx of patients afflicted with the serious complications of obstetrics which increase both infant and maternal morbidities and mortalities within the institutions, as now, as I am sure these many years, it has been true that the findings ascertained from the results in institutions were proportionately larger than those in private practice.

The one startling reduction of infant mortality in institutions took place in 1784, when Dr. Clarke, of London, introduced ventilation

in the wards of his hospital; before ventilators were installed, of 17,650 infants born alive, 2,944 died within 14 days—17 per cent; after ventilation was secured, of 8,033 babies born alive only 419 died—that is, 5.2 per cent. In 1835 Collins reported a still-birth rate of 6.7 per cent; of those dying within 14 days there were 1.7 per cent. The New York Lying-in Hospital in one period (1911) had 3.8 per cent for still-births and 2.35 per cent for those dying within 14 days; the next year the rates were 4.62 and 3.04 per cent respectively. The Johns Hopkins Hospital and Sloan Maternity, approximated these results. The table appended shows these results more graphically. (See page 136).

All the methods of investigation commonly known to medical science may be applied to the infant, child or adult, as we have a definite concrete body upon which to work: instruments of precision as aids to physical examinations as well as diverse laboratory methods may be employed to the end that accurate diagnoses are possible. With a clear interpretation of the findings it has been possible to apply remedial measures based upon scientific truths to the amelioration of the ravages of disease; a rational basis of conduct has been developed whereby infant welfare stations, as well as the influence brought to bear in private practice have demonstrated the advantages accruing to a routine investigation of infants in health and disease; these, coupled with trained medical advice and supervision, have been of transcendental importance. In contrast to the medical investigation of the human body, our procedures for the determination of intra-uterine anomaly is woefully deficient. As yet we have but the stethoscope and palpation as means of recognizing disturbances within the fetal body; in a few instances the X-ray may offer valuable information. As we see the rank and file of patients, our determination of fetal disease is largely speculative; at birth, when it is first clearly possible to examine the child, the disease with which it may be afflicted has already done its full damage. As it is, intra-uterine pathology is largely a *terra incognita* and offers to the enthusiastic scientist and clinician a most inviting field. At most, any basic principle laid down is an assumption founded upon the status of the mother; in other words, as the soil is so probably is the fruit. In certain disease conditions evidenced in the mother we have a clarity of vision concerning the status of the child, to mention but a few, syphilis, the various toxemias of pregnancy, diseases (infections) characterized by high thermal courses. But just

as certain diseases are peculiarly incident to the different periods of life, so the unborn child has its diseases which are undoubtedly peculiar to its embryonic development—these are largely unrecognizable before birth, and particularly recognizable only post mortem. Can we but believe that Craigin's 171 cases of death due to *congenital weakness* out of 389 deaths are within this category! Therefore, it is clearly evident that there are two types of intra-uterine disease—one, comprising the fetus itself, or its ovum which offer practically no evidences before birth, and therefore are not, as yet, amenable to any therapeutic aid whatsoever. The second, those which, as we see them today, are clearly expressed in physical crises in the mother. Again, from a diagnostic standpoint as well as from a possible remedial attack we may view the picture of the pathology of the unborn child from two angles: one, due to intra-uterine disease or anomaly, whether originating within the ovum or due to transmission from the mother; the other, the complications and accidents incident to birth. In the former, the gains have not been commensurate to those safeguards which may be placed about the latter. After all has been said and done it is impossible to differentiate clearly and positively the end results for each classification for the factors of safety in the first class are so definitely influenced by the skill and intelligence employed at the time of labor; for example, eclampsia carries a definite fetal hazard—the method used in delivery will increase or decrease that hazard.

INTRA-UTERINE DISEASE

It is not my intention to dwell upon the diverse problems concerned with the conservation of fetal life which have been elucidated repeatedly—I would merely refer to certain aspects which may at the moment appear apochryphal, but which surely will become of signal importance as the history of fetal life is unfolded, conjectural as some may now be, I firmly believe they offer a rational explanation for possibly a full half of the fetal mortality; the elucidation of these suggestive thoughts at the hands of enthusiastic investigators will be a lasting contribution to preventive and curative medicine, for discoveries which may ameliorate the economic loss of six to ten per cent of the products of conception will be as invaluable as those which have eradicated the great evils of diphtheria, smallpox, and have developed sanitary science to the degree of permitting the building of the Panama Canal.

We all are agreed that internal secretions have an enormous bearing on the stability of bodily function and life itself: that disease is frequently directly traceable, or at least in some directions conjecturally correlated, to derangements of production of the physiologically chemical substances generated in the non-secretory or ductless glands. Even with the paucity of knowledge pertaining to the influence of the thyroid, thymus, suprarenal, pineal and epicrine glands, to mention but a few, what a vista of potential possibility is spread before us of the influences at work within the human body, and what infinite portent the proper production, and proper interaction, of these diverse secretory substances has upon the normal development of the mind and body, both before and after birth. It is readily conceivable that the complexity of secretory functions peculiar to the mother may have a very malign influence on the child, or those of the child, a very deleterious effect upon the mother; certain it is that the essential factors dominating a normal poise of the child in utero must receive a most profound disturbance in the readjustment incident to independent existence. I have no doubt that the death of many a strong, sturdy child—born alive, but quickly succumbing without ascertainable anatomic or pathological cause—will be proven due to such failure of correlation of internal secretion. To what extent this same deficiency, or over-production of internal secretion of the ovum or the mother, operates in the production of an abortion, a non-viable child, a premature termination of pregnancy with perhaps a dead child, is purely speculative—in time it may be proven; then appropriate measures to combat these newly recognizable diseases of intra-uterine life will be ascertained.

During the past few years much attention has been given by the internists to the development of the knowledge of focal infections in relationship to so-called systematic diseases; the general medical literature has been voluminous on the subject, but hardly a word has been written of the association of focal infections to intra-uterine pathology. It is a fortunate contribution to our knowledge that we no longer believe the placenta is an impermeable barrier to the progress of disease elements from the mother to the fetus; it is a signal advance as it opens up a new interpretation of fetal pathology. Today, it cannot be doubted that practically all infections may be transmitted from mother to child through the placenta; just as we have

known these many years that syphilis was transmittable, so now conclusive evidence has been adduced that tuberculosis, pneumococcic infections, etc., etc., may be contracted by the child, from the mother, before birth.

OBSTETRIC CONSERVATION

It must be clearly appreciated that life expectancy of the child at the onset of labor is dependent on its viability (maturity or prematurity), its stability of function, whether all the conditions of pregnancy be normal or abnormal; associated with these are the problems germane to the labor *per se*: the skill, intelligence and judgment which the attendant brings to the patient are paramount. The personal equation of the operator facing operative intervention in a particular case is a vital element; one obstetrician will place the life of the baby on a par with that of the mother; another will undertake that operation which will vouchsafe the greater prospect for the mother. In no other field of medicine is the problem so complex, for two lives are involved: different operations whose purpose is to secure the delivery of the mother carry very different risks to the mother or the baby; to select an operation in a given case often requires a nicety of judgment which may tax the acumen of the most skilled. The knowledge of the problems of life, the factors of conservation of the unborn, have not been sufficiently correlated to permit us to place the ethnic value of the unborn child on a parity with that of the mother—the life expectancy of the mother is definite, the life expectancy of the unborn child is merely a potential possibility. It is to be regretted that there is too great a tendency these late years to place obstetrics upon a purely operative basis; it is an absurdity when the argument is bandied about that operative intervention is safer and better than uncomplicated spontaneous birth; operative intervention only should be permissible when nature has proven ineffectual, or when complications make an operation the lesser evil. When approved authority, with recognized skill, carries on a procedure with inherent risks to mother and baby, even though these risks be minimal, it is one thing, but when under such tutelage others, with little or no skill, assay the same methods, it spells disaster. The Cæsarean problem is a glaring example of this; the skilled obstetrician-abdominal surgeon, with a perfect technique, secures a brilliant result, when attempted, as has been done to an unbelievable extent, by the general practitioner and unskilled operator,

the combined mortality has been appalling. In no department of surgery has the definiteness, the clearness of indication, been so positively placed as in obstetrics, rules of conduct have been formulated which could make obstetric operative procedures fixed to positive fields, and yet, in practice, and too often in the greatest of maternity clinics, the placing of indications is utterly indefensible. These past years there have been so many fads and fancies introduced into obstetrics, and for a period, rendered popular that obstetric progress has been placed in real jeopardy; the promiscuity of the Cæsarean, forcep operations, "bag" therapy, twilight sleep, etc., are but examples of this unfortunate trend. There may be no question that many of the ordinary obstetric complications encountered in labor may be more happily combatted by a safe watchful expectancy than by any expression of the *furor operativus*.

There is a phase of this question of the conservation of life of the unborn which more properly encroaches upon the sociologic, touches Christian morals and involves the law, but may very properly be animadverted to here. Criminal abortion is a world wide habit, is so universal that it only becomes criminal when the authorities take cognizance of the fact of the perpetration of the offense. To what extent this offense against nature is perpetrated is difficult of determination; an approximation only may be made on figures which some may declare are conjectural. For twelve years and more the Coroner of Cook County, Illinois, has been particularly aggressive in investigating deaths due to criminal abortion; for many years the frequency of such cases coming to his attention has oscillated between forty and sixty annually. During the year just passed there were one hundred and fifteen such cases. The Committee on Criminal Abortion of the Chicago Medical Society estimated that within safety 10 per cent of such deaths acquired publicity, the rest were covered up by the families and the attendants, i. e., there were 1,150 deaths the past year directly or indirectly due to criminal interruption of pregnancy. Again it was assumed that something like 1 per cent of such operations were terminated by death, therefore there were over 100,000 cases of criminal abortion committed in Chicago. In other words, very possibly there was a criminal interruption for every child born at or near term. Chicago is neither better nor worse than any other community, I merely give local figures which I have at hand. This is such a vital problem that society

must give attention to it, a propaganda of education is highly desirable that this destruction of fetal life may be minimized; public sentiment must be aroused so that accredited officers will enforce the law against the large band of criminal abortionists, physicians and midwives, which infest every community.

THE SOLUTION

The conservation of human life—of mother and baby—may be most happily realized by various correlated circumstances.

1. It is desirable that every college for young men and women should have compulsory instruction on matters of sex, on social hygiene, on the influences of heredity. Every young man and woman should know the dire consequences to the offspring, as well as to themselves, from a tainted strain; every young individual should know that not only syphilis, but many of the physical and nervous evidences of the stigmata of degeneration may be transmitted to the offspring; should know that a clear descent only is obtainable from a clear strain. One young man argued with me—"my parents did not consider my inheritable possibilities, why should I consider the questionable attributes of my possible children." Such argument is the height of sophistry, and should be combatted where met. It is an utopian dream, but it would be well if it were possible to curtail the mating of the misfits: sterilization of the criminal insane, the moron, the epileptic, is a problem of the future. The legislative control of marriage of those afflicted with inheritable disease, requiring medical certificates from one or both parties, is theoretically correct—in practice it is of questionable value.

2. I would have a properly equipped maternity hospital with divisions covering the various needs of the prospective mother, her child before and after its advent into the world. I doubt the expediency of having independent centers for the prospective mother, for her confinement, and for the infant welfare. A properly co-ordinated whole under one efficient head or management will bring about more ideal results than independent, perhaps haphazard attempts at conservation. Such an ideal center would comprise these divisions:

a. A social investigator who should visit the home and determine the true economic needs of the family; if the family has a certain degree of affluence the head should be referred to approved, enthusiastic young practitioners who have the heart and the conscience to carry on the truths of conservation. A reasonable stipend should be

charged these people. Such physicians, when facing difficult problems, should be encouraged to secure aid from the parent institution.

b. Opportunity and encouragement should be given to all prospective mothers to avail themselves of the privileges of the antenatal clinics. A corps of physicians should carry out all the approved methods of investigation, as well as submitting rules for the safe guidance of the mother. As about one-half of the crises incident to the unborn are largely preventable, here is the first step to the conservation of infant life.

c. At the time of labor the record of the patient should be rendered available to the staff in charge of the confinement rooms. The personnel of this department should be imbued with the responsibility of the task: they should have an obstetric conscience; they should have a love and enthusiasm for the work which will permit them to sacrifice self in the need of the patients. Parenthetically, an administrative body of physicians should have control of the policy, of expediency, that no man may become a faddist or an extremist without check. This department should control the care of the mother and baby until discharged from the institution.

d. Every woman, before leaving the maternity, should receive positive instructions for her return for a post-partum examination—for recommendations for her welfare. A "follow-up" system should be employed to insure her return.

e. An infant welfare department where periodically the baby may be brought for supervision and care—where it may be brought if ill. In conjunction with this, there should be a department where infant foods may be prepared.

f. Systematic courses of lectures should be instituted, covering all the phases entering into the questions of personal hygiene, marriage relations, matters cognate to the bearing of children, the care of women in pregnancy and the care of women and their infants. The production of criminal abortion is so prevalent in all communities that especial emphasis should be laid upon the dangers of such procedures, and the menace to society; a procedure which exterminates such a large proportion of fetal life that it almost approximates the number of births at term is a parody on our civilization.

All this will cost money, large sums, if it be adequately carried out. To what extent the burden should be borne by public support,

what by private subscription, the future alone may determine. A government which appropriates millions for the study and cure of hog cholera, grants enormous funds for the elimination of the cotton weevil, and does not foster infant welfare is grossly deficient in its duty. Such an institution should exact a fee proportionate to the means of the beneficiaries; any charity which gives all and makes no endeavor to receive some compensation from those who accept its bounty is the worst type of prostitution of charity.

In closing, I would strongly deprecate any movement which endeavors to improve, or to create a new force of higher type of midwife. The midwife is an anachronism and should not be tolerated. The development of institutions along the lines designated, which may be very properly run in conjunction with approved medical schools, will satisfy every need. There is hardly an approved medical school in the country which has an adequate obstetric clinic; as a result practical obstetric teaching lags far behind the other departments of medical curricula. Comparatively few practitioners acquire that skill and knowledge commensurate to the needs of the parturient woman. Higher medical education needs this as vitally as does the poor woman of every community.

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FETAL AND INFANT MORTALITIES IN INSTITUTIONS

References.	Period	Tot'l No.	Abortions No. %	Stillbirths No. %	Died in 14 days No. %	Total Deaths No. %
R. Collins: Pract. Treat. on Midwifery, Dublin, 1834.....	1826-33	16,654	... ..	1,121 6.7	284 1.7 1,610 6.05	1,405 8.4
Körosi, Ashby & Wright, Dis. of Child., 1893, p. 13.....	1874-5	26,623	... ..	... ..	*Of 2,650 9.2 235 died	... ..
Winckel Handb. Bd. 2.....	1893-02	236,050	... ..	7,653 3.2	... ..	... ..
Tr. 3, Schultze, p. 1706.....						
Bulletin: N. Y. Lying-in Hosp., p. 24, June, 1911... ..	1910-11	5,228 †5,002	... .. 226 4.31	... .. 192 3.8	... .. 118 2.35	... .. 310 6.19
Bulletin: Ibid, March, 1913	1911-12	5,657 †5,412	... .. 245 4.29	... .. 262 4.62	... .. 165 3.04	... .. 427 7.36
Holt—Babbitt, J. A. M. A., Jan. 23, 15.....	1907-13	10,000 †9,747	... .. 253 2.53	... .. 429 4.4	... .. 291 2.98	... .. 720 6.44
Edwards: J. A. M. A., p. 1336, Oct. 16, 1916.....	1907-14	3,416 †3,384	... .. 32 .93	... .. 94 2.77	... .. 89 2.63	... .. 183 5.4
Williams: J. A. M. A., Jan 9, 1915.....		10,000	... ..	... ..	705 7.05	705 7.05
Moran: J. A. M. A., p. 2224, Dec. 26, 16.....		10,533 9,817	... ..	†716 6.19	... .. 623 6.3	... .. 1,339 13.1

*Died within 21 days.

†Abortions were eliminated to cast percentages of children of viable age: as admitted to institutions abortions, as yet are hardly preventable.

‡Moran does not classify abortions and stillbirths separately.

These figures show that the reduction of fetal and infant mortalities in maternities in the past 83 years is negligible. What improvement has occurred in private practice these same 83 years is highly conjectural.

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**THE IMPORTANCE OF PRENATAL CARE AS DEMONSTRATED AT THE
WOMAN'S MEDICAL COLLEGE, ITS HOSPITAL, THE WOMAN'S
HOSPITAL OF PHILADELPHIA AND THE WEST
PHILADELPHIA HOSPITAL FOR WOMEN**

LIDA STEWART-COGILL, M. D., F. A. C. S., Philadelphia

"They only, who build on ideas, build for eternity."—Tennyson.

In what better way can the people of this nation show their thankful spirit for maintained liberty, freedom and democracy than by making the United States the "*peak*" among the civilized countries for the best health and fewest deaths—lowest death rate—among its mothers and babies.—United States now stands third highest for infant deaths.

"Dr. J. Whitridge Williams, of Johns Hopkins University, states that of all new babies, 7 per cent are lost just before, during or within two weeks after birth; he further states that by careful *prenatal* care 50 per cent of these cases can be saved."

Before this can be accomplished *two* problems must be solved.

1st. How to save this 50 per cent of babies who die before reaching the first month of life from lack of *prenatal* care.

2nd. How to save those 15,000 mothers who die needlessly each year from conditions incident to childbirth, according to statistics from Federal Children's Bureau.

It was Bismarck who said "What we would have in a nation we must first put into the schools."

Then if *we* would desire a nation with the lowest death rate among its babies, we must *first* know if the amount of obstetrical teaching upon the importance of *prenatal* care is sufficient in our medical schools, for statistics gathered by this Association show that *prenatal* care is the greatest factor in the reduction of deaths of infants during the utero gestation period up to the end of the first month of life, and, therefore, obstetrics must be one of the *most* important branches taught in the colleges.

Where but in the medical college can teaching of this kind of care originate?

How is our nation to be impressed with the necessity of this work unless the graduate in medicine impresses it upon the community in which he lives and practices—and *how* is the graduate to know the importance of his teaching prenatal care unless it has been featured at the college from which he graduated?

Who is to feature the importance of *prenatal care* at the college but the professor of obstetrics?

And so we naturally conclude that the medical college is the proper source from which such teaching must originate.

When obstetrics is so *featured*, then, when the college is mentioned *this branch* will be the first thought of.

For who will not be willing to admit that certain colleges and hospitals are famous only because of the connections of certain physicians, that a hospital can be no greater than its staff or a college greater than its faculty?

Therefore if we would have the United States at the top of the list for the *lowest* death rate of infants, we must make sure our medical schools are maintaining a high and *uniform* standard of obstetrical teaching with enthusiastic attention to the subject of *prenatal care*.

After the student has been grounded in the principles and practice of obstetrics, including pregnancy, its hygiene and complications, etc., the so-called textbook knowledge of obstetrics—then there should be at least one or two definite lectures on the subject of importance of prenatal care in its *big, broad sense*.

These lectures would include instruction to students upon the duties of the physician toward the community in which he practices, i. e., the educating of these people to their *need* of prenatal care—thereby creating a demand for such care. For we acknowledge that just as a public demands so it will receive—and also that it is a child's inherent birthright to be properly born.

From answers received from a questionnaire sent out by the writer to a number of medical colleges in the United States in an effort to find out the *amount* and *kind* of obstetrical teaching on this subject of prenatal care, it would seem that while in a number of colleges stress is laid during the course of regular lectures and clinics upon the need of prenatal care, there is no definite or special lecture devoted to this subject with the exception of one college—the Woman's Medical College of Pennsylvania—which gives two definite lectures, thus many students may leave college with *knowledge* of how to care properly for the pregnant woman but without the sense of his own responsibility toward his community. When we do have greater amount of attention paid to this subject in colleges, the effort of the country to reduce infant mortality will meet with greater results, for this is the day of preventive measures.

Child welfare workers are better able to cope with conditions affecting the life of the babies from *one year of age up to school age*, than they are with *prenatal conditions* affecting mothers and infants up to one year of age—and they are calling for assistance and advice in remedying this defect.

One solution is the turning out from the colleges graduates who are deeply imbued with their responsibilities along this line toward the communities in which they live. Graduates who are enthusiastic over *baby saving* will not only direct or co-operate with these movements but *originate* new methods.

There is also a period of neglect of mothers of child-bearing age which extends from the end of puerperium up to the next pregnancy. During this time many preventable conditions arise and develop which seriously affect health and even the life of the mothers and help to make up the 15,000 mothers who die needlessly from conditions incident to child-birth. This condition may be overcome to a great extent by the establishing of a *mother's health clinic*—where the mother, after she is discharged from the obstetrical clinic at the end of the puerperium, can be registered and instructed to return at stated intervals according to her needs—returning at least every three months for careful physical and pelvic examination and for tests for syphilis and gonorrhea. By this method we will lessen those 15,000 needless deaths among mothers, and will be conserving infant life even before conception.

Is this too idealistic?

As I said in the beginning, why should our nation not show its thankful spirit for maintained democracy by making this the *ideal* nation for mothers and babies?

Therefore mother's welfare and baby's welfare should and must be of paramount importance in the world's work.

The Woman's Medical College of Pennsylvania was one of the first to realize the importance of *instruction to students on the importance of prenatal care*. As early as 1880 students came from all parts of the world to receive the advanced obstetrics as taught at this college by Dr. Anna E. Broomall, then Professor of Obstetrics, and when graduation time came visitors were all eager to see the one who had made the college famous for its obstetrical teaching—they had difficulty, however, in finding the little, wiry, gray-haired woman in

simple Quaker garb who so disliked publicity that she chose the least conspicuous seat on the platform—but there are hundreds of women physicians today who ascribe all their ability, interest and realization of the importance of good obstetrics to her enthusiastic teaching.

As early as 1888 Dr. Broomall established and for years maintained at her own expense a dispensary in the lower part of the city of Philadelphia, where students could go and personally care for a definite number of obstetrical cases in their homes. For some years previous to this an obstetrical clinic was held at the Woman's Hospital, where Dr. Broomall taught the importance of frequent observation of the expectant mother, frequent urinalysis with special attention to excretion of urea along with other ante-partum examinations and care, and this standard has been kept up by the enthusiastic work of the present Professor of Obstetrics, Dr. Alice Weld Tallant.

The Amy Barton Dispensary is now the name of this down-town dispensary and it is doing good work among the foreign women and affording the students opportunity for work in prenatal and postnatal clinics and the care of cases both at the homes of the patients and in the maternity. The students have no difficulty in securing the 12 cases as required by the state—often exceeding this number.

This institution cares for about 650 cases a year. The three women's hospitals of Philadelphia, namely, the College Hospital, the Woman's Hospital of Pennsylvania and the West Philadelphia Hospital for Women between them care for about 1,800 cases a year and the clinics are all managed in much the same manner. Each encourages the mother to register early in pregnancy and report every two weeks until the last six weeks, then each week. Blood pressure is taken at each visit, also presentation and position of fetus and location of fetal heart. A Wassermann test is made upon each patient, also tests for gonorrhea. A specimen of urine is obtained at each visit, pelvic measurements made and recorded at first visit to clinic. A printed slip with twelve things an expectant mother should know is given to each patient. Mother's talks to all registered patients are given at stated intervals.

A *prenatal nurse* visits the home and gives the mother advice upon things she should know and follows up delinquent cases, keeping record of hygiene of home, wages of husband, number of house visits, etc. All babies are referred to the Health Clinic.

The Woman's Hospital of Pennsylvania and the West Philadelphia Hospital for Women maintain a postnatal clinic in addition to the prenatal clinic.

This is a little different in character and purpose from the usual postnatal clinic. It is for *mothers* and *babies* from delivery or when discharged from maternity, to the end of puerperium or eight weeks after birth of child.

The writer feeling the term *postnatal* as generally used is too elastic and indefinite—as it could mean from birth to any age up to senility—prefers to use it for a definite period which extends from *two weeks* after birth to the *end* of the puerperium or *eight weeks*, the mother and baby reporting to clinic every two weeks until baby is two months old, after which time baby is referred to a *Health Clinic*, which includes children of pre-school age, and the mother is advised to report to a gynecological clinic as needed.

Object of Postnatal Clinic:

1. To have complete obstetrical record of mother and child from beginning of pregnancy to end of puerperium, 8 weeks.

2. Questions as asked by the Babies' Welfare Association as to how many babies living and breast-fed at end of first month can be more easily ascertained.

3. Pelvic condition of mother can be watched and patient referred to another clinic for further treatment when needed.

4. Making a stepping-stone to the establishing of a Mother's Health Clinic—thus overcoming that stage of neglect among mothers of child-bearing age.

5. Helping to save those 15,000 mothers who die needlessly each year and that 50 per cent of babies who perish before the first month of life.

It is by following such methods as these that colleges and hospitals may be able to keep our nation the "*peak*" among civilized countries for the best health and the *fewest* deaths of its mothers and babies—remembering always that "what we would have in a nation we must first put into the schools," always realizing that without the help and co-operation of nurses, social workers, child welfare workers and others little can be accomplished.

Therefore, in summing up this paper the following points stand out, viz:—

1. The *two-fold* duty of the teacher of obstetrics in medical colleges.

- a. More uniform and higher standard of obstetrical teaching in medical colleges, with greater attention to the subject of *prenatal care*.

- b. Imbuing the student with his responsibilities toward the community in which he lives regarding the importance of *prenatal care*.

- 2 Establishing of a greater number of *postnatal clinics* and health centers.

- 3 Establishment of health clinics for mothers of *child-bearing* age.

THE WORK OF THE PHILADELPHIA GENERAL HOSPITAL IN PREVENTING INFANT MORTALITY

MISS BLANCHE SOULE, Philadelphia

Believing that preventive medicine is the keynote of modern medicine, that every child has the right to be born under the most favorable conditions and that every child is a valuable asset to any community, we will begin the care of the child during its prenatal life. The education of the mother in the home and in the prenatal clinic, by doctors and nurses is an example of preventive medicine. The life of the child as well as the mother is safeguarded by the intelligence gained from these sources. The best kind of education is the education that helps the mother to help herself.

Our Social Service Department takes care of our prenatal work outside the hospital, and we do a great deal of prenatal work in our obstetrical department. Our social service worker finds the expectant mother, endeavors to gain her confidence and interest and impress upon her the importance of medical care during her pregnancy. She is then directed to the prenatal clinic and at the same time the patient's name, address and a short history, home conditions, etc., are sent to the clinic. If the patient does not visit the clinic as she promised, the clinic finds out why she has not come and looks after her.

When the expectant mother does not come under the care of our Social Service Department until the sixth month of pregnancy, in the greater number of cases, she is admitted to the hospital, where she is under constant supervision. Many times this mother is either the support, or partial support, of the family. It is surprising in how many instances an expected child seems to be an excuse for the husband to depart from the home, leaving all the care of the family upon the mother. If there are other children (and many times there are three or four) a temporary home is provided for them. In other words "they are boarded out," so that we may bring the mother into the hospital. Seventy-one per cent of the patients admitted to our maternity department have been waiting mothers. When admitted they are, as an average, six months pregnant. These mothers are given the right kind of food and care and are required to take a cer-

tain amount of exercise every day. They are given materials to make clothing for the coming baby. This keeps their minds and hands busy and we have a happier patient.

Our maternity department is made up of two distinct departments, one for our clean patients and the other for our venereal patients. In our clean maternity wards during the past year we have not had one case of toxemia in the patients who were under our care several months before delivery. In our venereal maternity ward, we had one case of toxemia in a patient who was admitted when eight months pregnant.

Seventy-seven per cent of our waiting mothers in our clean wards and 64 per cent in our venereal wards were illegitimately pregnant. Had we not cared for these patients within our own doors very many of the babies would not have been born at full term. Our waiting mothers who belong to our venereal wards are treated as soon as they come under our care. Many of them have given birth to live, fairly strong babies. We believe the care of the expectant mothers in our wards has helped very materially to decrease the number of premature births and the number of deaths in the first months of life.

No woman comes into our maternity department without becoming a social service problem and no woman is discharged with her baby until home conditions have been investigated. The mother who has a home and a husband to care for her is discharged to her home and is not visited after we are convinced that they are able to care for themselves. The mother of the illegitimate baby is not permitted to leave the hospital until provision is made for herself and baby. She is urged to keep her baby, if possible, especially if she is nursing the child, and the importance of maternal nursing is in itself sufficient reason for every effort to be made to have her do so. Support is gotten from the father, if at all possible. An attempt is made to have her reunited with her family. If this cannot be accomplished she is gotten into a home where she can keep her baby with her. Every mother with her illegitimate baby is kept under our care for at least one year.

In our children's department during the hot weather and the recent epidemic we lost very few babies. During the summer our babies were kept in the coolest places we could find. It meant, many times, moving the babies three and four times a day. Our object was to keep the babies out of the sun and on the porches as much of the day as we could, as well as at night.

When the weather was hot and humid we had nothing on our babies but a diaper, but we watched carefully that they did not become chilled. Also, on cool days our babies live out of doors, but then they are warmly dressed, wear caps and special attention is given to keeping their hands and feet warm. By living on the porches they get all the fresh air it is possible to have. They are given plenty of water and our food is good. The best certified milk on the market is provided, buttermilk used for our babies is made in our milk room, and wet nurses are secured whenever possible; the mothers coming to the hospital twice a day and having their milk expressed. This is used for our weak babies and difficult feeding cases. Every baby which is premature in character is taken care of in the same way as though it were prematurely born.

This past year it has been a very difficult matter to get wet nurses. Since the increase in wages has not kept pace with the increase in the cost of supporting a family, economic conditions have forced these women to assist in the support of the family. On the other hand many a mother is so greedy for money that she is induced, by the great demand for labor and the high wages paid, to wean her own baby and go into factory or shop.

In our children's department we have the same division as in our maternity department for our clean and our infectious patients. Our vaginitis patients have a separate floor of the hospital. The doctors and nurses taking care of these children do not come in contact with children in any other part of the hospital. There is separate clothing for this department and all diapers are burned.

We use no wash diapers in any of our children's wards.

Last but, as we believe, by no means of least importance, is the nursing care. We have been able to place more nurses on duty in our children's wards. In no other branch of nursing does so much depend upon the nurse as in the care of babies, and fortunately this year we have had more nurses, Councils having granted us fifty more nurses for our Training School.

In our work of prevention the obstetrician, the pediatrician and the nurse must work together with one common aim. We believe if our nurse would accomplish the most good in this great preventive work she must be thoroughly prepared for it. She has lectures in obstetrics and pediatrics and classes in these subjects, attends clinics and does follow-up work on the wards.

We endeavor to relate the theoretical work with the practical problems of life. Our nurses have social service and public health lectures in their first year. This is carried right through their training. In their third year they spend some time in our Social Service Department and with the Visiting Nurse Society. Unless the nurse has an idea of the home life of her patients, her teaching has not been practical and cannot be applied to human problems.

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PEDIATRICS

JOINT SESSION WITH THE CHICAGO PEDIATRIC SOCIETY

Chairman, I. B. ABT, M. D., Chicago

SYPHILIS AND ITS RELATION TO INFANT MORTALITY

P. C. JEANS, M. D., St. Louis, Mo.

In considering syphilis in its relation to infant mortality, it is necessary to consider not only the infant born with this disease, but all other cases, whether inherited or acquired, occurring within the procreating age. If acquired syphilis of adults were prevented or properly managed, there would be no infantile infection. In the average syphilitic family the father is first infected prior to marriage, and at the time of marriage the infection is usually in a more or less latent state. Even in this period of latency the infection is transmissible to the mother who, in most instances, is entirely unaware of its existence in herself. From the mother it is transmitted directly to the product of conception at some period in its prenatal existence, resulting in its early death or being born with the disease, which may sooner or later become manifest. Though abortions, miscarriages and still-births are not usually considered as a part of infant mortality, the consideration of these events as a waste of potential life is of equal importance to infant mortality. In order to have a comprehensive view of the situation it is necessary to show by statistical review the prevalence of syphilis among adults and the effect of this infection upon the product of conception, whether it be by terminating life prior to birth or after birth or by affecting the morbidity of the first years of life.

Numerous statistical studies have been made as to the prevalence of syphilis, but these have been largely based on hospital or dispensary admissions, which patients for some reason or other usually come from the poorer class, and require free or inexpensive medical care. There are available no accurate statistics concerning the prevalence in a true cross section of population.

The following table represents the results of such studies among the adult admissions to hospitals and dispensaries in five cities of the

United States. Statistics from several hospitals having venereal wards were purposely omitted.

	Cases	Positive Wassermann	Per cent
Baltimore (1)	1,080	116	10.8
Boston (2)	4,000	600	15.
Chicago (3)	418	56	13.4
Ann Arbor (4)	2,771	160	5.8
San Francisco (5)	6,995	518	7.4
	<hr/> 15,264	<hr/> 1,450	<hr/> 9.5

Vedder (6) reports that 13 per cent of 11,933 accepted recruits in the U. S. Army (1916), 15 per cent of 856 candidates for the police force in Washington, D. C., and about 5 per cent of 3,203 candidates for commission in the army were Wassermann positive. These statistics are the result of Wassermann surveys and therefore represent the minimum of syphilis in the groups examined. It is worth noting that in the same locality 5.8 per cent of hospital admissions were found syphilitic by the Wassermann reaction. Warthin found 30 per cent syphilitic by necropsy study. Without citing further statistics, it is evident that a minimum of 10 per cent of the adult males of this country, well or sick, are syphilitic and it is probable that the commonly accepted figure of 20 per cent is nearer the truth. I know from personal experience that a generous proportion of the fathers of syphilitic children are Wassermann negative at the time the child is brought for treatment.

Though the statistics for unmarried women generally show a low incidence of syphilis (3 to 4 per cent) this fact need not concern us to any great extent because of the fact that after marriage the proportion of syphilitics again approaches that for men. The following table shows that among 5,383 married pregnant women in four cities of this country, 9.66 per cent were syphilitic, as shown by the Wassermann reaction:

	Cases	Per cent
Chicago (7)	116	10.6
Brooklyn (8)	1,822	8.
Brooklyn (9)	892	7.9
Philadelphia (10)	40	7.5
New York (11)	2,488	11.5
	<hr/> 5,358	<hr/> 9.66

The statistics just enumerated show a wide prevalence of a disease having a marked effect upon the infant mortality, infant morbidity

and the birth rate. That some marriages among syphilitics remain sterile because of this disease is certain, but that syphilis plays an important role in sterility is far from proven. As will be seen from tables elsewhere in this paper, certain syphilitic groups studied show a greater fertility than non-syphilitic families of the same class. Nine per cent of the marriages studied by Raven (12) remained sterile, while 32.5 per cent of the marriages studied by Haskell (13) among individuals who later became paretic remained sterile. Raven's figure is within the normal limit, while Haskell's is exceptional.

When conception has taken place, the effect of maternal infection upon the product of conception is dependent to a large extent upon the duration of the pregnancy at the time of fetal infection. The infection of the germ cell, if such an event ever occurs, would preclude the possibility of its further development. The earlier in pregnancy the infection of the fetus, the more likely is that pregnancy to terminate in a dead or non-viable infant. The birth of a viable syphilitic infant signifies its infection late in pregnancy. The time at which fetal infection occurs is dependent upon the activity of the infection in the mother and this in turn is dependent to a large extent upon the time which has elapsed since the onset of her infection. In many instances in untreated mothers pregnancies occurring 10 years or more after the infection of the mother have resulted in the birth of non-syphilitic children. It has become a well-recognized fact that syphilis is the largest single cause of the death of the fetus at or before term. Still-births have averaged in the neighborhood of 5 per cent of all births wherever studied, and at least one-third of this number is due to syphilis (14), (15), (16), (17). A compilation of statistics shows that of 4,148 pregnancies in syphilitic families, 1,258 or 30 per cent resulted in the death of the fetus at or before term. That this is more than three times greater than what might be considered the normal waste of life at this early age is shown by a similar study among the poorer class in both St. Louis and London, and including no obvious syphilis. In St. Louis 9.9 per cent of 886 pregnancies and in London 9.4 per cent of 826 pregnancies resulted in the death of the fetus at or before term. Though there may be some doubt as to syphilis being a frequent cause of sterility, there is no doubt that it is a fairly frequent cause of childless marriages.

SYPHILITIC FAMILIES

	Families	Total Pregnancies	Miscar'ges & Still B'hs.	Per cent
Holt (18)	193	427	123	28.8
Love (19)	21	172	32	18.6
Harman (20)	150	1,001	172	17.2
Jeans (21)	100	331	131	40.
Jamieson (22)	71	253	95	37.5
Hochsinger (23)	134	569	253	44.4
Raven (12)	82	350	101	28.9
Post (24)	30	168	53	31.6
Haskell (13)	58	167	44	26.2
Tarnier (25)	42	90	56	62.
Julien (26) .....	..	206	44	21.4
Pilleur (27) .....	..	414	154	37.
		4,148	1,258	30.3

GENERAL—NO OBVIOUS SYPHILIS

	Families	Pregnancies	Miscar'ges & Still B'hs.	Per cent
Jeans and Butler (16)	200	886	83	9.9
Harman (20)	150	826	78	9.4
	350	1,712	166	9.7

Though syphilis is a frequent and well-recognized cause of premature birth, there is but little statistical evidence in the literature as to the role it plays. Adair (28) states that of 50 premature infants observed in Minneapolis, 9 or 18 per cent were proven syphilitic. Prematurity occurred but eight times in 886 pregnancies in 200 St. Louis families in which there was no obvious syphilis, while it occurred ten times in 453 pregnancies in 100 syphilitic families, showing an incidence two and a half times greater in syphilitic than in non-syphilitic families, and indicating that syphilis is the most frequent cause of this event (16). The mortality among premature infants is relatively high whether with or without syphilis. When the problem of maintaining the nutrition and body heat of a premature infant is added to by a syphilitic infection, the outcome is much less hopeful.

There is in the literature a scarcity of statistical studies bearing on the incidence of syphilis in the infant population of this country. Because of the high mortality connected with syphilis in infancy, the group studies among older children or among groups containing older children give an incidence much lower than is to be found in infancy. In St. Louis, clinical study was made of 854 infants of one year or under and Wassermann reactions were made on all infants whose family history, personal history or examination gave any suspicion of syphilis (16). Of the 854 infants studied, 42 or 4.9 per cent were found to be

syphilitic. This figure represents the minimum in this group because it was not a complete Wassermann survey. In New York Holt (29) found 6.2 per cent positive Wassermann reactions among 161 infants under 2 years of age. Holt's series was selected to the extent that it contained no clinical syphilis but did contain a certain number of infants whose history or examination gave a suspicion of syphilis. Commisky (8) reports 3.2 per cent positive Wassermann reactions in 1,074 newborn babies in Brooklyn. Because of the frequency of a negative Wassermann reaction in a syphilitic new-born baby such a study, though interesting, does not represent the true incidence of syphilis. It would seem safe to assume an incidence of about 5 per cent for syphilis in our infant population.

It is somewhat difficult to arrive at the incidence of syphilis in the offspring of syphilitic families for the reason that at the time of such a study usually many of the children are not living and the history as to syphilis is uncertain. In a St. Louis (21) study, all the living children of 100 syphilitic families were examined and 78 per cent found to be syphilitic. In a similar study Mott (30) found 58 per cent and Harman (20) 65 per cent to be syphilitic, though Harman states that he accepted the statement of the parents as to the health of many "healthy" children not examined by him. It would seem fair to assume that an average of 75 per cent of the living children in a syphilitic family are infected.

Perhaps of equal interest in this connection is the proportion of the pregnancies in syphilitic families that result in living non-syphilitic children. Among 2,450 pregnancies of our own and collected cases, 408, or 16.6 per cent resulted in children who were living at the time of the study and found to be non-syphilitic. This is but slightly more than one-fifth of the healthy living children to be found in a similar study among an equal number of pregnancies in non-syphilitic families.

SYPHILITIC FAMILIES					Per cent Healthy among Living
	Families	Pregnancies	Living Syphilitics	Living Healthy	
Mott (30)	34	175	41	30	17.
Harman (20)	150	1,001	390	210	21.
Jeans (21)	100	331	116	33	10.
Julien (26) . . . . .	..	206	50	43	21.
Post (24)	30	168	..	39	23.
Hochsinger (23) ..	134	569	..	53	9.3
		<hr/> 2,450	<hr/>	<hr/> 408	<hr/> 16.6

GENERAL—NO OBVIOUS SYPHILIS					Per cent
	Families	Pregnancies	Living Syphilitics ;	Living Healthy	Healthy among Living
Jeans and					
Butler (16)	200	886	...	669	75.5
Harman (20) ...	150	826	...	634	79.2
		<hr/>		<hr/>	<hr/>
		1,712		1,303	76.

A consideration of the mortality in infancy in connection with vital statistics is practically useless because of the current attitude of secrecy toward this infection. However, it may be worth mentioning that 3.5 per cent of the infant deaths among the living births in St. Louis have been attributed to lues (16).

A survey of about 300 syphilitic families in which there occurred 1,359 living births shows that 30 per cent of these infants died at an early age. These infants were not observed and the cause of death is unknown.

	Families	Living Births	Died early	Per cent
Post (24)	30	168	64	38.
Jeans (21)	100	200	51	25.5
Harman (20)	150	829	229	27.6
Julien (26) . . . . .	..	162	69	39.5
		<hr/>	<hr/>	<hr/>
		1,359	412	30.3

A similar survey of 350 presumably non-syphilitic families shows that of 1,489 living births, 15 per cent of the children died early.

Harman (20)	150	732	94	12.8
Jeans and Butler (16)	200	757	129	17.
		<hr/>	<hr/>	<hr/>
		1,489	223	15.

Since syphilis is the only known factor of difference between these two groups it would seem that the infant with syphilis has just half the expectation of life as does a non-syphilitic infant, leaving out of consideration all other factors. This would also allow us to infer that 15 per cent of the living births in syphilitic families die, not necessarily directly of syphilis, but on account of this infection. As a matter of fact group studies of clinically syphilitic infants show a much higher mortality than this varying from this figure to as high as 95 per cent in certain unfavorable groups. Hochsinger (31) among 263 infants gives a mortality of 20 per cent in the first two years, while Heine (32) gives a mortality of 45 per cent in 100 infants. Of the more recent reports in this country Holt (33) among 32 infants

found a mortality of 12.5 per cent due directly to lues, and 37.5 per cent due to other causes, while the Wassermann was still positive, making a mortality of 50 per cent due to or associated with syphilis. In a St. Louis study we (35) found similarly a mortality of 40 per cent in 100 syphilitic infants. The normal death rate for infants is about 10 per cent of the births, so that a mortality of 40 to 50 per cent among syphilitic babies represents a mortality of 30 to 40 per cent due to syphilis. In marked contrast to these figures are those of Sylvester (34) who had in 50 syphilitic infants an immediate mortality of 8 per cent and no ultimate mortality. All such studies in children's hospitals or clinics of necessity leave out of consideration those infants dying while under obstetrical care. Commisky (8) reports that in 15 per cent of the living births of Wassermann-positive mothers the infants die before 10 days of age, as compared with 3.5 per cent of the living births of Wassermann-negative mothers. From these figures it is seen that syphilis in infancy causes a mortality of at least 15 per cent of the living births in syphilitic families, and that 30 per cent as a general mortality rate among clinically syphilitic infants would be a conservative estimate.

The prognosis in a syphilitic infant depends upon several factors, including the severity of the infection, the type of feeding and the state of nutrition. In studying the family conditions revealed by the birth and death certificates in St. Louis (16), it was found that in the families represented by infants which were born alive but which later died of syphilis, 59 per cent of all the children born in these families are now dead. In the families represented by the still-births, 81 per cent of all the children born are now dead. Still-births represent a greater severity of infection than in the case of an infant born alive. Infants who show clinical syphilis at birth rarely live more than a few weeks regardless of all other factors. On the other hand, an infant may appear more than usually robust and its only symptom of syphilis be a positive Wassermann reaction. Such an infant has about an equal chance of surviving the period of infancy as a non-syphilitic infant.

In certain cases syphilis may not be severe enough to determine the death of the infant if such an infant is nursed at the breast, but if artificial feeding is resorted to the nutritional factor in addition to the infection causes death. It is very significant that 80 per cent

of the deaths among our St. Louis syphilitic babies have been among those who were breast-fed but three months or less (35). Stating this in another way, the mortality among the infants artificially fed was 60 per cent, while among those breast fed was but 16 per cent. A survey among the older syphilitic children reveals the fact that but 15 per cent of them had been artificially fed in infancy, while a similar survey among older children of a non-syphilitic group from the same class of patients showed that 28 per cent had been artificially fed in infancy. Almost twice as many non-syphilitic children survived on artificial feeding as did syphilitic children. As far as the immediate outcome is concerned, the continuance of breast feeding and maintenance of nutrition is of importance equal to or greater than specific medication. Syphilitic babies are usually much undernourished when first seen by the physician. As compared to the normal infant a large group of syphilitic babies in our clinic averaged three pounds under weight (35). So frequent is this finding that malnutrition is to be regarded as one of the symptoms of infantile syphilis.

Death in a syphilitic infant may result from the infection alone, from a progressive malnutrition or because of a lowered resistance, and accidental intercurrent disease. Often all three factors are concerned. Because an infant dies of pneumonia does not mean that syphilis played no part in the outcome. Most of the deaths occur under 10 months of age, and the mortality is appreciably lowered after 7 months.

Resume of the statistics just reviewed :

From 10 to 20 per cent of adult males and about 10 per cent of married women are syphilitic, and a minimum of 10 per cent of marriages involve a syphilitic individual.

Seventy-five per cent of all the offspring in a syphilitic family are infected.

In a syphilitic family 30 per cent of the pregnancies terminate in death at or before term, a waste three times greater than is found in non-syphilitic families.

Thirty per cent of all the living births in a syphilitic family die in infancy, as compared to a normal rate of 15 per cent in the same class.

Probably 30 per cent of clinically syphilitic infants die as a result of syphilis.

But 17 per cent of all the pregnancies in syphilitic families result in living non-syphilitic children which survive the period of infancy.

About 5 per cent of our infant population is syphilitic.

According to St. Louis vital statistics, 3.5 per cent of all infant deaths are ascribed to lues.

It is admitted that other statistical reviews will, no doubt, give somewhat different results, but the magnitude of the importance of syphilis will remain essentially the same, one of the largest if not the largest public health problem. The possibilities for the manipulation of such statistics are tempting, but I will refrain. Even those who think that infant mortality from syphilis in a community is relatively insignificant must agree that, as a social and economic problem in a syphilitic family, it assumes a maximum importance when 75 per cent of the pregnancies result in syphilitic offspring, when 20 per cent of these die at or before term from the infection, when 25 per cent of those born alive die in infancy as a result of syphilis and when only 17 per cent of all the pregnancies result in non-syphilitic children who survive the troubles of infancy. The waste in infant and child life in a syphilitic family is over 60 per cent, as compared to less than 25 per cent in a non-syphilitic family of the same social plane. Nor should be left out of consideration the morbidity among the living, the mental stress of the parents and the many months of medication necessary for the treatment of the living.

Nor is syphilis as unimportant to the community as many seem to believe, or as the vital statistics would indicate. It is fully as important an agent in destruction of infant life as tuberculosis, and when fetal deaths are taken into account it is of much greater importance. From an analysis of the statistics of the Registrar General, Osler (6) estimated that, including still-births and early deaths of infants, the number of actual deaths from syphilis was of such a magnitude as to place syphilis an easy first among the infections as a cause of death instead of the tenth place it had been given in the report. Downing (6) in a similar estimate from the vital statistics of Massachusetts shows that syphilis falls but little behind tuberculosis as a cause of death.

It is quite probable that we will shortly see an increase of syphilis in the general population as a result of the war. That syphilis has always been increased during war and during the period immediately following a war is a well-recognized fact, and statistics so far compiled show that the present war is no exception (36). Because of the vigorous measures adopted, the increase will probably not be as great in this country as would otherwise have been the case. The personal prophylaxis with penalties for non-compliance (37), the restricted

zones barring prostitutes, the prompt energetic treatment of infections, the abolition of alcohol, the laws newly passed by most of the states in regard to the control of carriers, and the educational campaign among the enlisted personnel will, no doubt, have considerable effect in not only lessening the increase of infections, but also in paving the way in an abnormally rapid manner for future profitable public health control of syphilis. For the proper control of syphilis it is necessary to consider the problem from the standpoint that it is a communicable disease rather than as a social or moral problem. The primary point of attack in the prophylaxis of infantile or any other variety of syphilis is the adult carrier. For such carriers to be controlled means that their whereabouts must be known, and this in turn means enforced morbidity reports. The quarantine of such carriers may be carried out theoretically by instruction or actually by probation or commitment, and in such a manner that treatment continues (38). In order that proper treatment be secured, the establishment of clinics by health authorities and the increase of hospital facilities for this purpose will doubtless be found necessary. If the control depended entirely upon enforced legal measures, it would surely meet with failure. It must also depend upon the education of the public in the risks and dangers of illicit intercourse and the education of the physician in the importance of early diagnosis and proper treatment. A national control with one broad, strong policy has been advocated as necessary, but this is scarcely possible with our present political system except as a war measure. Though much may be accomplished by the measures outlined, syphilis or other venereal disease cannot be stamped out completely so long as there exists an ineradicable instinct as a cause for its existence. Next in importance to the adult carrier is the syphilitic prospective mother. Such women may be reached in various ways, but the largest number can be reached best by a larger use and more widespread distribution of prenatal clinics. It is generally agreed that adequate treatment of such a mother throughout the period of her pregnancy or even through the last five months of her pregnancy will usually result in the birth of a healthy, non-syphilitic child. The shorter the period of treatment prior to birth the more likely is the child to be syphilitic; but even the shortest periods of treatment are not without benefit. If such a mother has had inadequate or no treatment prior to the birth of her child, it is then desirable that the

infant receive treatment at the earliest possible moment. Here again the largest number should be reached through postnatal or infant welfare clinics. Having diagnosed the family as syphilitic because of the infant, the future pregnancies of the mother should be protected by proper treatment of the parents. This can usually be done with full co-operation after proper explanations.

Since there is no reasonable hope of preventing syphilis, our greatest effort must be directed toward treating the disease early and well. In the case of infants the management must be in the hands of one who is not only expert in the diagnosis and treatment of this disease, but one who is also expert in managing infant nutrition. Such a need calls for a high standard of education, which fact places the burden of the syphilitic infant upon the medical schools and their associated hospitals and clinics.

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PUBLIC HEALTH SERVICE PROBLEM FOR THE NATION-WIDE CONTROL OF VENEREAL DISEASES

C. C. PIERCE, M. D., Assistant Surgeon-General U. S. Public Health Service,
Washington, D. C.

The war made it necessary for the United States to face frankly the problem of venereal disease. In the Journal of the American Medical Association of March 10, in abstracting an article appearing in a foreign journal, the following statement was made: "Since the war began, a total equivalent of sixty (60) European divisions have been temporarily withdrawn from the fighting for venereal diseases."

When in April, 1917, war was declared against Germany, the seriousness of the venereal disease problem was recognized, and the facts were faced by the War Department with honesty and courage. The work was founded on the principle that sexual continence was not only possible for soldiers, but was also highly desirable from the standpoint of physical efficiency, morals and morale. Its chief features were education of the men, repression of disorderly resorts, provision of healthful, interesting and constructive recreation; prophylaxis, or early treatment, for men who had exposed themselves; punishment for those who exposed themselves and failed to take prophylaxis; and finally, expert treatment for those who either came into the army already infected or broke through all the barriers set up by the military authorities.

On the other side of the water a similar program was instituted, but an exception had to be made of the feature of law enforcement—repression of prostitution. The only alternative was to prevent our soldiers as far as possible from coming in contact with prostitutes, either public or clandestine.

One of the first general orders issued after one of the early contingents landed in France, impressed upon American line and medical officers the danger of such contact and their responsibility toward their men. Whereas, in America, punishment involving court martial was imposed upon men who became infected with venereal diseases, only in case they had not taken the prophylactic treatment, in France the contraction of such a disease was made per se an offense against military regulations.

A second order soon followed urging sexual continence and the maintenance of high moral standards of living, and requiring men reaching Paris and other cities in France to live in barracks or hotels designated by the Provost Marshal in which prophylactic stations had been installed. In the meantime, both at ports of embarkation and in training areas, careful search was made for houses of prostitution and they and the surrounding districts were placed out of bounds for our troops, military police being used to enforce orders.

In order to prevent deliberate venereal infection on the part of any slackers who might think that they would thus escape military duty, this order also provided that venereal cases should be treated while on duty status at dispensaries within their own organizations instead of being evacuated to hospitals, where they would use space and medical facilities needed for the care of the wounded. As a result, loss of effectives was prevented, and instead of having three 1000-bed hospitals filled with venereal patients by a given date, as had been expected and prepared for, the Americans had by that date no venereal hospitals and only about three hundred (300) non-effective hospitalized cases, mostly in regimental and field infirmaries.

"America has the noblest official moral aspirations," said a high official of the French Surgeon-General's Office in a report on the situation, "but can our ally guarantee the arrangement?" This frank skepticism regarding the success of these efforts led to a very careful investigation of results under the direction of the Surgeon-General of the Army. The figures thus obtained gave proof of the soundness of the American policy: "In one body of 7,401 troops belonging to various branches of the service, prophylactic treatments were given and only one case of venereal disease developed. During two months in France one infantry regiment of 3,267 men had a record of only eleven (11) prophylactic treatments and no new cases of disease. No complaints were made against either the health or morals of these organizations."

Of course, these figures are not adequate to describe the conditions among all the American overseas forces; they are given only as an answer to the above question, "Can the result be guaranteed?" Yet it has been found to be generally true that continence is maintained by a large percentage of our soldiers with good rather than evil effects.

On July 1 the President issued an executive order placing all public health activities carried on by federal agencies under the supervision of the Public Health Service. On July 9 Congress passed the Act

entitled "An Act making appropriations for the support of the Army for the fiscal year ending June 30, 1918." Chapter XV created an Interdepartmental Social Hygiene Board consisting of the Secretaries of War, Navy and Treasury, and also a Division of Venereal Diseases in the United States Public Health Service. This chapter is known as the Chamberlain Kahn Act.

In compliance with the President's order and the provisions of the above-mentioned act, the United States Public Health service, through its Division of Venereal Diseases, is directing a thorough campaign against venereal diseases in civil communities throughout the United States, working through state boards of health and utilizing medical, educational and law enforcement measures.

A great deal of thought has been given to the medical attack on venereal disease in the United States, for it is a problem which not only affects the soldier and the sailor, but the civilian of today and tomorrow.

Section 6 of the Act provides for the allotment to state boards of health of one million dollars (\$1,000,000.) each year for the two fiscal years beginning July 1, 1918, for the fight against venereal diseases. For the second of these two years the payment of the state's allotment is conditioned upon the expenditure of a like amount by the state in the prevention of venereal diseases. For the first of these two years this condition is not imposed.

I. State boards or departments of health receiving their respective allotments have to agree to follow co-operative measures:

(a) Venereal diseases must be reported to the local health authorities in accordance with state regulations approved by the U. S. Public Health Service.

(b) Penalty to be imposed upon physicians or others required to report venereal infections for failure to do so.

(c) Cases to be investigated, so far as practicable, to discover and control sources of infection.

(d) The spread of venereal diseases should be declared unlawful.

(e) Provisions to be made for control of infected persons that do not co-operate in protecting others from infection.

(f) The travel of venereally-infected persons within the state to be controlled by state boards of health by definite regulations that will conform in general to the interstate regulations to be established.

(g) Patients to be given a printed circular of instructions informing them of the necessity of measures to prevent the spread of infection and of the importance of continuing treatment.

II. The Division of Venereal Diseases details to each of the various state boards of health an officer of the Public Health Service in uniform. His work is directed jointly by the Public Health Service and the State Board of Health. The general plan of work for the state bureau is as follows:

- (a) Secure reports of venereal infections from physicians.
- (b) Suppressive measures, including the isolation and treatment in detention hospitals, and establishments of free clinics.
- (c) Extension of facilities for early diagnosis and treatment through laboratory facilities for exact diagnosis and scientific determination of conditions before released as non-infectious.
- (d) Educational measures which include informing the general public as well as infected individuals, in regard to the nature and manner of spread of venereal diseases and measures to combat them.
- (e) Co-operation with local civil authorities in their efforts to suppress public and clandestine prostitution.
- (f) Accurate detailed records must be kept of all the activities of the venereal disease work, copies to be forwarded to the U. S. Public Health Service.

III. Local or legislative funds that may be available shall be used by state or city health authorities having jurisdiction for extension of the work.

IV. In extension of the educational measures the state's health authorities and its bureau of venereal disease shall exert their efforts and influence for the organization of a state venereal disease committee for furthering the comprehensive plan for nation-wide venereal disease control.

V. The state health authorities shall take such measures as may be practicable for the purpose of securing such additional legislation as may be required for the development of control of the spread of venereal infections.

VI. The state allotment shall be expended along general standard lines for all states and in accordance with an accounting system, to be forwarded by the Interdepartmental Social Hygiene Board, approximately as follows:

(a) For treatment of infected persons in hospitals, clinics and other institutions, including arsphenamine and other drugs, 50 per cent of the allotment.

(b) In carrying out educational measures, 20 per cent.

(c) In carrying out repressive measures, 20 per cent.

(d) In general administration and other activities of venereal disease control work, 10 per cent.

(This distribution is provisional and subject to modification after conference and agreement between each state and the U. S. Public Health Service to best meet the needs of the particular state).

The United States Public Health Service will be available at all times to state organizations in co-operative work, and assistance will be given to states wherever possible through detail of employes, securing of arsphenamine and providing literature for educational matters. (Reprint from Public Health Reports for September 13, 1918).

Most states have developed a well organized co-operative plan and have exhibited initiative and energy in stimulating the early establishment of clinics. No general method can be laid down; the officer in charge must study local conditions and make such concessions or modifications as his judgment deems necessary.

Each clinic established acts as a preventive agency by directly decreasing the number of foci and by correlation of repressive, medical and educational methods.

The success of the clinics depends upon the sympathetic cordial support of the medical profession of the clinic area, and so an educational campaign is carried on among physicians. Practitioners are made to feel it is their clinic.

Whether the clinic is maintained as an integral part of a general hospital or not, the district health officer should devote special attention to the problem of obtaining bed facilities for patients coming under the care of the clinic who may require temporary hospital care.

The medical and surgical staff varies with the size of the clinic, but at least one physician must possess special experience with venereal diseases and have a thorough knowledge of modern methods of diagnosis and treatment. Consultation work by the Chief of Clinic with practitioners of the Area should be encouraged. The nursing staff consists of at least one female nurse, whose work is essential along the lines of taking female histories and follow-up work of the cases

A chain of venereal dispensaries is thus established over the state, located in such manner as to furnish treatment facilities for the entire state. A central state Wassermann laboratory should be available for the entire state, and in the large cities branch laboratories may be utilized.

The Bureau, in co-operation with the Red Cross, in extra cantonment zones, is now (December, 1918) conducting twenty-five clinics, and in co-operation with state boards of health, approximately one hundred and twenty-five clinics for treatment of venereal diseases.

The following is a summary for the period October 15 to November 15, 1918, of the activities of twenty-six venereal disease clinics:

During the six hundred and nine (609) clinic days represented there was a total of twenty-five thousand, two hundred and twenty-four (25,224) visits to the clinics, with an average daily attendance of forty-one (41) at each clinic.

There were admitted during the past month two thousand, three hundred and one (2,301) new cases. On November 15 there were eleven thousand, one hundred and forty-nine (11,149) cases remaining under treatment. Twenty-eight thousand, nine hundred and eighty-one (28,981) treatments were administered during the month.

Two thousand, seven hundred and seventy-seven (2,777) doses of arsphenamine were administered to syphilitics.

A total of two thousand, nine hundred and thirty-three (2,933) prostitutes were treated in the clinics, detention homes and jails. Of the eight hundred and thirty-three (833) prostitutes placed in detention during the month eight hundred and twelve (812) or ninety-seven and five-tenths (97.5) were found to be infected with venereal disease. The remaining twenty-one (21) or two and five-tenths (2.5) were held for further diagnosis.

Five thousand, three hundred and sixty-five (5,365) microscopical examinations were made. Nineteen (19) of these were dark field illuminations for *treponema pallidum*. Three thousand, two hundred and sixty-seven (3,267) were for release.

The number of nurses employed was forty-three (43) female and fourteen (14) male. Social investigations were made from thirteen (13) of the twenty-five (25) clinics. Social records were kept in six (6) of the thirteen (13) clinics which made investigations. Follow-up work is being carried on in several states with very good results. One

officer writes: "Those of us interested in the broader scope of the work in the Division of Venereal Diseases appreciate that we owe these unfortunates something more than food, quarters and mere humane treatment."

The social service nurse has a wonderful field in which to work. The problem of what should be done with these women when they leave an institution is certainly great. They should not be allowed to return to their former associates and surroundings.

It is felt that there is a special need of increasing the social service and follow-up work of the clinics, which up to the present time has been handicapped by a lack of trained personnel. Nurses specially trained and adapted for this work are badly needed. It is hoped that means of giving intensive training to a select group of nurses may be found in the near future.

Realizing that ignorance and misinformation are the cause of a great deal of venereal disease, emphasis is being placed on education. The work of preparing materials, establishing contacts and developing methods in educational work has been intensively developed during the past few months. The following pamphlets have been prepared for circulation: Keep them Fit, Manpower, Venereal Disease A Public Health Problem for Civilian Communities, When They Come Home, The Appeal to Advertising Media, Shall We Finish the Fight? Venereal Disease and the War, Responsibility of Druggists to the Public Health, The Need of Sex Education, and War on Venereal Diseases to Continue, of which 1,500,000 copies were distributed.

In September and October a special corps of field men were sent into various states to have general charge of lecture work among drafted men, and of the distribution of a pamphlet entitled "Come Clean," prepared especially for these men. Over a million of these pamphlets were distributed by the state adjutant generals to local draft boards in twenty states.

Venereal disease is not to be attacked as a war epidemic, but as a civilian problem and a peace problem. When the members of the American Expeditionary Forces return to their homes the United States want them to come "with no scars except those won in honorable conflict." What program can we formulate which will keep them "fit to live" as well as "fit to fight?"

Approximately five million men have been for a limited period under strict military discipline, and during that time have been taught the advantage of clean living, the necessity for the avoidance of alcohol and the dangers of exposure to communicable diseases. These men have been warned of the danger of the infection being conveyed to members of their families and to their offspring.

Immediately upon the signing of the armistice the Selective Service Boards ceased to functionate as an agency whereby groups of men could be called together, and therefore plans were at once considered in order to counteract, so far as was possible, relaxation of effort resultant upon the expectation of an early return to a peace status.

A conference was called by the Public Health Service to discuss the emergency caused by the sudden cessation of the war and approaching demobilization. As a result of the conference, telegrams were sent by the Public Health Service to all state boards of health, urging that no relaxation in efforts to fight venereal diseases be permitted. Telegrams were sent by the Secretary of War to the governors of all states and to the mayors of 60 large cities, and a Service representative was sent to a special reconstruction conference of the National Municipal League, with the result that telegrams were sent by the National Municipal League to the mayors of all cities with a population of 25,000 and over, and plans were made to follow up each telegram with a letter.

This informal conference also prepared certain recommendations to be presented to the authorities of the Army and Navy relative to measures whereby one last concerted effort might be taken to lessen the dangers attending upon the return of venereally infected persons to civil life. The important features of the recommendations were as follows:

1. That a public announcement be made by the proper authorities to all men in the Army and Navy to the effect that no man would be discharged from the service who had a venereal disease in an infectious stage.
2. That competent authority decide upon a standard for determining the non-infectious stage of these diseases.
3. That all men discharged from the service as non-infectious but uncured be followed up in civil life through Public Health Service officers, state board of health officials and local health officials, so that

proper continued treatment might be given these men until ultimate recovery.

4. That a special leaflet be prepared by the Army Medical Department and distributed by them to each man at the time he is released from military service. This leaflet should carry a strong appeal to each particular soldier and sailor that he carry back home with him the lesson he had learned during his period of military service, and that he spread the information he had acquired among his civilian associates. The object of this leaflet being to carry over into civil life the good work that has been done by the various agencies interested in the protection of the health of our fighting forces.

5. As a preliminary to the release of the military forces, it was suggested that all available officers that could be spared from strictly military duties be detached to make one final visit to the civil communities adjacent to cantonment areas for the purpose of again appealing to civil authorities to continue the work of law enforcement, vice suppression and providing facilities for the isolation and treatment of venereally-infected persons.

During the period of reconstruction, which will follow upon the completion of demobilization, the task of venereal disease control will not be lessened, but will rather be broadened and made greater. The entire area of the United States must be covered through an intensive co-operative campaign in which all agencies, national, state and local, can play an important part.

The Service will work through the various state boards of health, as thereby the local organizations will be assisted and strengthened in carrying on venereal disease control work as a permanent phase of the health activities. Greater burdens will be placed upon the state and local organizations after the demobilization has been completed than are at present being encountered. This will result from the fact that during the period of the war the Public Health Service and the Red Cross have been maintaining at their own expense, twenty-five venereal disease clinics in extra cantonment zones. Upon the closing of the camps it will be necessary for the state or local community to take over the financing of these clinics. At the present time thousands of venereally infected persons are being detained in various locations throughout the United States for the reason that such persons were a menace to the armed forces. These infected persons are just as much

a menace to the industrial army and the civil communities as they were to the armed forces, and it is not believed that local authorities will be willing to risk exposing their families and associates to these dangerous communicable diseases, any more than they were willing to risk exposing our soldiers and sailors to these infections.

The work that has been started as a war measure in the various industrial plants throughout the country is just as essential as a reconstructive measure. The problem confronting this country at the present time will be increasing the national efficiency so that the United States may take its proper place among the great world powers. All prosperity and efficiency, health and happiness, depend upon the physical fitness of the great mass of citizens. The lessons that have been learned during the past two years in regard to the tremendous loss of life, efficiency and health caused by syphilis and gonorrhea cannot but cause those responsible for the future of this country to arise and meet the serious and deep responsibility for continuing the war on venereal diseases in order to prepare the next generation to have that degree of self-control that is necessary to avoid the exposure to venereal diseases offered by vicious conditions.

The problem that now confronts the country is no longer that of making the world safe for democracy, but the more difficult and continuous problem of making the world safe for posterity.

DISCUSSION

Dr. John M. Dodson, Chicago: Attention might be called in this connection to the West Australian type of ordinance which has been adopted in Chicago for the reporting of venereal diseases. When some eight or ten years ago our former health commissioner instituted regulations ordering the reporting of these diseases, it was thought to be a mistake to report the names of these patients, for it seemed inevitable that it would result in patients with venereal diseases not presenting themselves to a physician, or to a dispensary. The Australian ordinance does not require the reporting of the name of the individual; the case is reported by number by the physician; it is made compulsory that he report it with the understanding that if the patient fails to keep himself under the private treatment of a physician his name shall be reported and proper steps taken to see that he is kept under treatment until he ceases to be a menace to the community. Of course, with the great variety of physicians we have to deal with and the indifference of some to the public welfare, it is certain this is not a perfect measure, but I believe such a plan as that will not result in patients failing to consult physicians, and that it is the best type of ordinance we have at the present time

for keeping public control of these cases of syphilis and other venereal diseases.

Dr. Edward P. Davis, Philadelphia: I desire to call the attention of the Association to an apparent danger in the management of syphilitic cases. Since our knowledge of the cause of syphilis has become evident, namely, the *spirocheta pallida*, we can explain what was formerly an anomaly. It was formerly said that a woman giving birth to a syphilitic infant could safely nurse that infant; that the infant would not infect the mother, and therefore, the normal relationship of nursing mother and child could be maintained. We now know that the reason why a syphilitic infant does not infect the mother is the fact that the mother is latently syphilitic, and that after she has passed through her reproductive life, even though she does not show any signs of syphilis, she should be kept under observation and treatment. It is therefore the duty of physicians and nurses who have under their observation women bearing syphilitic children to see to it that while the woman may nurse the child with apparent impunity she should be kept under permanent observation to prevent the development of syphilis. It is furthermore a matter of considerable interest that the modern treatment of syphilis with salvarsan will result, unless care be taken, in the death of the infant, for if salvarsan be given in large doses to a pregnant woman the infant is often lost, while if salvarsan be given to a woman who has syphilis after the birth of the child, both mother and child are influenced in a favorable degree.

In appreciation of the excellent paper, I desire to add this note of warning, namely, all women giving birth to syphilitic children must be considered from the standpoint of medicine as latently syphilitic and must be kept under observation for their own sake and their subsequent offspring.

Dr. I. A. Abt, Chicago: I would like to ask Dr. Jeans whether he considers it worth while to treat and try to save these syphilitic babies, and if so, do they ultimately make reasonably healthy, serviceable citizens?

Dr. Jeans: Yes, it is worth while, for if they live and are properly treated during the period of infancy, they are for the most part entirely well and free from the disease of syphilis so far as we know. That is true in infancy as it is true in early acquired syphilis, but we know the earlier we get such an infection the more easily it is cured, and the more completely it is cured. In the case of infants, we feel that proper treatment begun early will completely free these infants from the disease, and after that time they will be as any other infants.

Dr. Taliaferro Clark, Washington, D. C.: As Director of the Bureau of Sanitary Service, American Red Cross, I wish to mention participation by the Red Cross in the control of venereal diseases in extra-cantonment areas which was so well set forth by Dr. Pierce in his paper. The statistics given by him serve as a conspicuous illustration of what can be accomplished by co-operation between volunteer and Federal agencies. The statistics as given by Dr. Pierce and his explanation amply justify the Red Cross in the expenditure of money for such purposes. In fact the Bureau of Sanitary Service was the pioneer in this

field, having established a number of dispensaries as a war measure for the protection of the health of the military forces, in the civil districts adjacent to military camps long before public funds in requisite amount became available.

As far back as November, 1917, the War Council of the American Red Cross appropriated the sum of \$100,000 to be expended by the Director of the Bureau of Sanitary Service for the control of dangerous communicable diseases. Although the Red Cross did not contemplate making a distinction in the necessity of control between gonorrhea and syphilis and any other form of communicable disease which might threaten the efficiency of the military forces, this money was largely expended in the control of this group of infections in the civilian population immediately adjacent to military camps and naval bases. It was important to do this because naturally the sources of infection were not to be found within the boundaries of military reservation, but in the adjacent civilian population. In fact, a director of one of these dispensaries reported that in one camp one hundred and twenty soldiers named one common source of venereal infection. In this particular extra-cantonment area there was treated and cured an average of forty infected women each month. Let us say then that each of these forty would have infected not one hundred and twenty but only ten men per month, military efficiency was thus conserved to the extent of four hundred per month in this one sanitary zone alone. This work was successfully accomplished through the splendid co-operation between the U. S. Public Health Service, the U. S. Army and the American Red Cross. These clinics were established on the following basis:

The U. S. Public Health Service furnished the specialists for treatment, the Commission on Training Camp Activities follow-up and social workers, the local communities the legal machinery, and the Red Cross the equipment of the dispensaries with funds sufficient for their maintenance including the purchase of drugs and instruments, the salaries of nurses and dispensary space when this could not be furnished locally.

In general the function of the clinic is as follows:

Treating carriers of infection.

Hospitalizing selected cases wherever practicable.

Utilizing and instructing local practitioners in their control.

Distributing free of cost to local practitioners salvarsan and allied preparations under prescribed regulations.

Making free bacteriological examinations, serological tests and other laboratory investigations, at the request of local practitioners and administrative officers.

Advising persons who may desire confidential information with respect to possible infection of themselves, proper treatment and related subjects.

Dr. S. McC. Hamill, Philadelphia: I think we often fail to realize the close etiologic relationship between infant mortality and the diseases under discussion. Those of us who have worked in the field of medicine have been overwhelmed by it. The members of this Association who attended the Richmond meeting in 1917, or those who have read the Transactions, will remember that Dr. Bartlett, of New York, read a very illuminating paper in which he laid great stress upon syphilis and gonorrhea as destroyers of infant life.

Those who have not read that paper will profit by doing so, as it is one of the best dissertations upon the subject that has been published.

Yesterday during the discussion of the subject of birth control much criticism was directed against those individuals who resort to measures to prevent conception, especially against those of the educated classes. This criticism is well deserved, but when we think of the wide prevalence of the venereal diseases and of their destructive effect upon the reproductive function of both men and women, it makes us realize that there are other than voluntarily adopted means of prevention to account for the vast army of childless families. Let our criticism therefore include those who are childless because of immorality and its inevitable consequences, the venereal diseases. The statistics that have been gathered as a result of the examinations of the men going from civil life into military service have shown an appalling prevalence of the venereal diseases. The office of the Surgeon-General was so impressed by this fact that most elaborate procedures were adopted for the cure of the infected and the protection of the clean, in which work the Public Health Service, some of the State Departments of Health, the American Red Cross and the Y. M. C. A. ably supported them.

I want to say a word in commendation of the program that the Public Health Service plans to carry out for the protection of the nation from this veritable plague. It has chosen the right moment for the furtherance of its plan—when the recently gathered information is fresh in our minds and the work for the protection of the soldiers has shown what can be done to control the spread of these diseases. It would have been unfortunate if all the splendid work of the agencies that have been delving in this problem for the benefit of our army should not have been extended to the nation as a whole.

If this work receives the public support that it demands, its ultimate effect upon the moral and physical health of the nation will be without limit. Our whole attitude toward the venereal diseases must change. A false and absurd modesty has kept the people of the nation in absolute ignorance of one of the most destructive plagues that has ever affected the human race. Those of us who are interested in the health of our people must prepare the public mind to understand the far-reaching destructive power of the venereal diseases and the folly of closing our eyes and ears to this knowledge, so that the splendid work which the Public Health Service has inaugurated may prove effective.

A year ago there was read before a semi-public audience in Philadelphia a series of papers, one of which dealt with the subject of venereal diseases. In the public press of the following morning there was quite an extensive description of that meeting. All of the papers were commented upon in detail, with the exception of the paper on venereal diseases. Neither the title nor the name of the author of that paper appeared. The great public press which is willing to describe the most fiendish crimes in the utmost detail and to carry advertisements of the fake cures of these destructive diseases, is unwilling to acquaint the public with the nature and pernicious influence of these dread diseases. It seems a crying shame that this agent which

ought to be one of our most effective weapons in the battle against these diseases, is afraid at the present time to discuss them in its columns. Let us do what is in our power to force the public press to do its duty to the people of the nation in respect to the venereal diseases. Until we can get the public to come to our aid in protecting it against the ravages of these diseases, I believe we are going to fall far short in our efforts.

Dr. C. C. Pierce (closing): I should like to emphasize the point that the plan I outlined in some detail clearly indicates that the Public Health Service has no ambition to attempt to dominate the activities of state or local boards of health. All we want to do is to carry out the provision of the Act of Congress, and see that the states do their share in helping us out in putting the problem up to each local community.

Next year, in order that the state shall receive its share of the Federal appropriation, the state legislature must make a similar appropriation, which at once puts half of the burden on the state, and then they can get the other half from the Federal government, so that any appropriation made by a state legislature will be doubled by the Federal allotment. In passing the responsibility on to local communities it should not be impossible for the state health officer to have the city in which he starts a clinic to pay at least half of the expenses. In that way, by appropriating a million dollars from Congress, that million will run up to about three million where the money is actually expended. If we get the local communities to feel a definite responsibility for the control of venereal diseases the same as for tuberculosis and typhoid fever, the providing of safe water and safe milk, we will be able to get the work on a permanent basis. It is essential for us to have the public press tear away this veil of prudery that they have put over their columns for so long, and occasionally now we do see the words gonorrhea and syphilis in a daily newspaper of standing. An article was recently prepared containing these words and a few pictures, one of a boy and girl going over the precipice with eyes blind-folded and we succeeded in getting that into many newspapers and furnishing information to the public in that way. It is much better to do this than to have representatives of the press sit at a table and take down a few notes and then prepare an article on what they have heard, because the probabilities are the editor will blue-pencil much of what the reporter has written on the ground that he thinks the readers of the paper would object to it. If the editor of a newspaper could be assured that a large number of subscribers would not cancel their subscriptions or at least criticize the paper if they saw some statement about the dangers of gonorrhea and syphilis, he would not hesitate to publish reports containing these words. People subscribe to newspapers because of the information they get from them, and the right sort of newspaper publicity in regard to venereal diseases educates the public. Our object is to educate the masses of the people. We have no desire to advertise any service or any governmental organization, but we do want to advertise the fact that there are two dangerous communicable diseases that are widespread throughout the community of which few people

know anything, and the best way to reach the general public is through newspapers and through motion pictures.

We are using the army film "Fit to Fight" and have changed the name to "Fit to Win," and omitted a few features which applied only to the army. This film has been passed by four state boards of censors. It may be shown to selected audiences of either men or women, but not to children under sixteen years of age. This film will do more to bring home the deep sense of realization of our responsibility in regard to these things than will newspaper articles because it will make one think.

If one reads in the newspaper that there are 9,000 men suffering with gonorrhea in a large city it would make no particular impression, but if in a moving picture film the devastating results of one case of gonorrhea or syphilis are visualized the audience will be very deeply impressed with the danger of these communicable diseases.

The venereal disease program cannot be successful unless the great mass of citizens are aroused to the importance of the work. The program is being built up upon the same general principles as the campaign against other communicable diseases, and must have the cordial support not only of all governmental agencies, but of the State, County and City Boards of Health. Even this support is not sufficient, for all local agencies, such as clubs, fraternal organizations, labor unions, nursing organizations, charitable organizations, teachers' associations, and every patriotic citizen must be enlisted in the Army to continue the War on Venereal Diseases.

NUTRITION PROBLEMS IN WAR TIMES

DOROTHY REED MENDENHALL, M. D., Washington, D. C.

The subject of nutrition in relation to war and the effect of war conditions on the health of our child population is today a most pertinent question. In the past we have been so interested in the protection of maternity and early infancy, of saving babies, that we have given too little time and too little interest to the question of the nutrition of the older child.

Perhaps you have heard the story told about a Japanese gentleman who was being shown the sights of the city by a New York business man. After they had dashed about from place to place, the New Yorker hurried his friend to a subway. When they had come out he said complacently, "I saved ten minutes by that." The Japanese gentleman replied, "What are you going to do with it now you have saved it?"

Our position today, in regard to the child, is quite similar. We have worked hard to save more infants in war time than we ever did before, but we have not been particular about what happens to the baby we save—what happens to the pre-school child or the school child so far as health or nutrition is concerned.

Dr. Baker reminded us last night that before war had swept over the world there was marked under-nourishment in our school children from 15 to 25 per cent, as shown by the survey of Dr. Thomas D. Wood, of Columbia University. In New York City, the increase of malnutrition in the schools since 1914, as given by Dr. Baker, is most startling. In 1914, 5 per cent of the children were seriously under-nourished; in 1915, 6 per cent; in 1916, 16 per cent., and in 1917, 21 per cent.

Reports for the pre-school age are more difficult to obtain, but as far as we can judge from the various child health associations, milk committees and other agencies working with the pre-school child, a progressive increase in malnutrition and in rickets is observed in these little children in our large cities.

Rural children will probably show less nutritional disturbance than city children during the war period. For one thing, they are nearer the food supply.

The rise in the price of food is an undoubted factor in the increase of malnutrition. The Monthly Labor Review for November, 1918, reports a 72 per cent average increase in all retail food prices during the five-year period from September, 1913, to September, 1918. This increased cost of living may affect the health of the child in two ways. The mother may provide less food for the family and so cause under-nourishment in the child, the member of the family most easily affected by a restricted diet; or by an unwise substitution of a cheaper food for one whose price is rising, the unintelligent mother may seriously impair the value of the child's diet during the growing period without there being actually too little food. One instance of such improper food substitution and one that is increasing, to the impairment of the health of our children, is the giving of tea or coffee for breakfast, instead of milk.

All of us realize that certain dietary substances are necessary for growth, but how many mothers know which foods are growth foods? The essential foods for children besides cereals, which furnish energy, are milk and green vegetables, and to these butter and eggs may be profitably added. Children can do without butter and eggs, if they have an abundance of milk and green vegetables. A great deal of emphasis has been placed recently by nutrition experts on the protective nature of milk and green, leafy vegetables. Their high mineral and vitamine content practically prevent the possibility of a dietary deficiency, if they are included liberally in the daily food. Milk has additional value as a factor in growth, in the nature of its protein. The milk proteins, as well as other forms of animal protein, have a far higher value than proteins from vegetable sources. Milk is the sole food, at our disposal, furnishing an abundance of animal protein, minerals (except iron), and vitamins, so that milk is truly "the factor of safety in the human diet."

A number of pediatricists stress the fact that some children cannot take milk or that a certain proportion of the child population gets too much milk. A true intolerance of milk is most rare; most children who are not able to take milk have either not had their diet properly balanced to include milk, or have been allowed to dictate what they should eat. The actual percentage of families with income sufficient to allow of a superabundance of food is probably too small to make it likely that any considerable number of our children

are getting too much to eat. It has been estimated recently that 90 per cent of the total number of families in the United States are living on \$2,000 or less, and probably 80 per cent of these are living on \$1,000 or less. For small incomes under \$1,000, it takes at least 50 per cent of the income to provide food for a normal family of four or five members at the present food prices. In view of these facts it seems absurd to argue that milk is better cut out of the child's diet, because a few children are furnished too lavish meals, making the addition of milk disadvantageous in these cases.

The great difficulty in the pre-war period, which has been accentuated by war conditions, was that our children either did not have enough food or enough of the right sort of food. Even without any question of poverty, mothers through ignorance of food values, carelessness in the choice of articles of diet, or lack of discipline in regard to the taking of food, may underfeed their children and deprive them of the essentials for growth, especially the protective foods, green vegetables and milk, or milk fat in the form of cream or butter. You will all agree, I am sure, that there has been a marked decline in the use of milk throughout the United States accompanying the rise in price of this commodity. It may be of interest to you to have a summary of the findings of the Children's Bureau's studies made in three of our large cities last year of the use of milk by children under 8 years. The families in these surveys included six members, two at least being children under 8 years, and in four-fifths of the families there were children under 2 years of age.

In Washington, in the families investigated, 45 per cent. of the children under 8 years, exclusive of those breast fed, were not having any fresh milk to drink; in Baltimore, 66 per cent., and in New Orleans, 70 per cent. In the latter city, 41.7 per cent. of the families, which included two or more small children under 8 years, took no fresh milk, and over two-thirds of the children between the ages of 2 and 7 who were getting no fresh milk to drink were taking either tea or coffee. The average amount of milk purchased daily by the families taking milk varied in the three cities from one quart to 1.1 quarts. In Baltimore the change in the amount of milk taken in the families from the preceding year could be noted, as these families had been under observation during this period. Twenty-nine per cent of the children between the ages of 2 and 7 were receiving milk to drink, as against 60 per cent the year before.

Milk is an essential food in five groups of cases, not only for infants who are artificially fed, for all children through adolescence, and for convalescents, but for expectant and nursing mothers. The value of milk in the production of breast milk is well known to the lay and professional public, and has been verified by animal experimentation and by such reports as that of Dr. Hoobler on the effect of various diets on human milk production.

Milk is undoubtedly the best milk producer. The importance of milk in the diet of the expectant mother is as yet little realized. The fact that milk in the diet of the expectant mother bears a relation not only to the future production of breast milk, but to the normal development of the fetus, should be universally appreciated. The possible relation of rickets to the deficient diet of expectant mothers as well as to the deficient diet of nursing mothers, suggested in the study made by Dr. Hess of rickets in the colored settlement of the Columbus Hill district in New York City, should be verified. It seems probable as Dr. McCollum claims, that "there are tens of thousands of human mothers who are attempting to nurse infants on diets derived too largely from the seeds of plants and their milled products. Such diets produce inferior milk and may be the cause of grave disorder in the very young, and it is not possible to make up diets derived from even these four types of foodstuffs (seeds, tubers, roots and muscle tissue)' in any combination which will induce normal nutrition. Milk produced by a mother whose food consists entirely of seed products, tubers and meat will not be of very satisfactory quality for inducing growth."

The importance of milk at puberty needs to be investigated. Milk, the protective food, the most complete growth food of all foods, surely should be included in the diet during the most prolonged period of active growth. In girls, the possible effect of stunting development by under-feeding during this period, or of causing permanent injury of the organs of reproduction, or of the future function of milk production must be considered.

In regard to the question of the importance of milk for expectant and nursing mothers, I wish to call attention to the stand England took in regard to milk for mothers and young children.

The Milk Order (Mothers and Children), February 1, 1918, empowered local authorities to arrange for a supply of food and milk to the priority class, and to supply this free or below cost. The pre-

vious milk supply scheme which gave prior claim to expectant and nursing mothers and children up to 5 years had been found ineffectual, as the families most needing milk in "the priority class" were rarely able to afford more than a fractional part of the milk they were entitled to.

The new Milk Order was followed by an order from the local Government Board authorizing local authorities to recover 50 per cent of the expenditures made from the grant for maternity and child welfare. This "rate-aided" milk has been given liberally in some localities and has undoubtedly been of value in retaining the nutritive condition of mothers and young children.

England also took an interesting stand in regard to the rationing of expectant mothers and infants. On July 14, 1918, the Ministry of Food granted for the expectant mother during the last three months of pregnancy an extra ration a week represented by two meat coupons or one butter or margarine coupon, and a priority certificate for one pint of milk daily, in districts where the milk priority scheme was in operation. Nursing mothers are not given extra rations but are permitted to use the ration allowed their infants. Children under 18 months are entitled to a preferential allotment of one and one-half pints of milk daily, and mothers nursing their children are given this amount.

The price of milk in England is reported to be double the pre-war price, while in this country during the past five years there has been a 61 per cent average increase in price. General regret is expressed in the current child welfare periodicals of England that the Government had not rationed milk at the outbreak of the war, but waited until irreparable damage had resulted from the curtailing of the food of the young child before taking the measures cited above.

Are we to wait for the slow process of education to make the nation realize the value of milk in the diet? We have, I believe, convinced the public that milk is necessary for the infant. We may be able to convince the public that milk is necessary for the expectant mother and for the nursing mother. It will, however, be a long time before milk will be looked on as a necessary part of the diet of the young child and the adolescent boy and girl.

There is a possibility of furthering the education of the public in regard to the value of milk as food by the passage of state and city

ordinances providing for the furnishing of milk for the mid-morning luncheon or under-nourished school children. I have been much interested in the splendid work that is being started in our large cities to treat under-nourished children, both in school and dispensary nutrition clinics. This work is a vital part of child conservation, and it should be made state-wide, so as to include the rural child, who from all accounts is equally in need of help. Here again we may further the education of the public by giving, instead of free cod-liver oil, free milk or milk powder to build up the nutritive condition of the child.

The most important object in child welfare work during the reconstruction period is that some agency shall be made responsible for the health of our child population, and that there shall be *continuity of care* and supervision of every period of childhood from conception, through infancy, the pre-school age, the school period and adolescence.

One of the duties of state agencies responsible for such work would be the finding of the under-nourished child in every community, the investigation of the causes of this condition, the education of the family as to what constitutes an adequate diet for the child, the training of the child in proper food habits, and the provision of milk for those needing extra nourishment and not able to provide it for themselves. For as Mr. Herbert Fisher said, "We do not want to waste a single child."

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AMERICAN ASSOCIATION
FOR
STUDY and PREVENTION
OF
INFANT MORTALITY

NOW
The American Child Hygiene Association

TRANSACTIONS OF THE NINTH ANNUAL
MEETING

CHICAGO, DECEMBER 5-7, 1918

PART III—Proceedings of the Sessions on Problems of
War and Reconstruction, Nursing and Social
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Reports of Committees

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SESSION ON PROBLEMS OF WAR AND RECONSTRUCTION

Chairman, S. McC. HAMILL, M. D., Philadelphia

LESSONS FROM THE DRAFT

S. JOSEPHINE BAKER, M. D., D. P. H., New York City

I am very glad that Dr. Hamill has made an apology for me stating that I have had very little time for preparation. In times past I have had the honor of reading papers before you but this is the first time I have ever come before you so totally and absolutely unprepared.

I have some figures of the draft and thought, in some way or other, I might be able to weave them into a story that would bring to us a realization of the tremendous responsibility, as well as the enormous opportunity, that we are facing at this time. We have had our thoughts so much centered upon war and what war has meant, and on war in relation to the child, that we have been working almost as an emergency committee in trying to stem the ravages taking place from day to day among children. We have not realized that the war was ever going to stop, and suddenly we are face to face with the vast reconstruction problems which involve not only our social and economic status but the reconstruction problems which involve the welfare of our community in its deepest sense.

I think we can say, without fear of contradiction, that the future of our country depends upon the virility and vigor and health of its population. We cannot very well think we are going to succeed as a nation, or that we are going to endure, unless we have physical stamina individually as well as nationally. This is not a new thought at all. We can go back to the dark ages and follow history as far as we choose, and can study everything that has been done in other countries than our own from the beginning of time, and we will find running through the histories of these countries the underlying thought that the vigor of the people must be maintained. The reasons for that have been varied. Sometimes there has been the idea of keeping up standing armies, in countries like France and Germany; sometimes

it has been because of a declining birth rate or a high death rate which has disturbed the balance between the intake and the output, and consequently a nation has, whether it likes it or not, to take an account of stock, not from altruistic motives, not from any particular humanitarianism, but for the welfare of the country as a whole. In this country we have been singularly remiss about questions of this kind. We have an idea that we are growing by leaps and bounds, that we have been adding to our population in such an enormous way by immigration that it could never be possible that we could come to a time when it would be necessary to sit down and consider whether or not we were building upon a rock of enduring greatness.

The time has come now when such a taking of account is before us. We have never had in the history of the world so abrupt a demarkation from one point of view to another as we have to face at the present moment. We have the vast experience of Europe to draw from. We know what the countries over there who have been fighting through these wearisome years are thinking in regard to their future and we know that only in a slightly lesser degree we are facing the same problems in the United States. We can no longer look at the question calmly and say we can continue to build our population up by immigration and let the native-born die. We can no longer complacently accept the addition to our country which comes from receiving alien adults and not by birth of children within our own territory. We can no longer face, without regard to our own conscience, the appalling waste of life among the younger age group in the United States.

During the war that has just passed we have had numerous reports of casualties. The latest one I saw the other day was a report of the number of our men who died from wounds received in action or who had been actually killed on the firing line, and the total for the nineteen months amounted to 53,000. During that same nineteen months, 475,000 children under five years of age died in the United States. For every one of the men whom we lost in this terrible war, we have lost nine children under five years of age in the United States. No doubt, in time of war such a loss of life would be expected, but in time of peace and in peaceful occupations and in a fruitful country, such waste of life is criminal. There is no doubt about it that an organization of this kind has before it a stupendous future,

studying this problem, standing behind all the efforts that are being made to meet it, and offering in no small way every effort toward a final solution. The United States has not learned its lesson. We have sent money and sympathy almost without stint to the peoples of Europe. We have been feeding French babies and Belgian babies, and until very recently we have extended this aid very largely to the London children.

Not long ago the American Red Cross opened five canteens in London for feeding undernourished children. To a very good friend of mine, who was just sailing a few weeks ago to take charge of one of these canteens, I said "Do you know the proportion of undernourished children in London?" She said that she did not. I said: "According to the last report of the Health Officer of Great Britain, there were between 8 and 9 per cent of undernourished children in London between the ages of five and fifteen years." In New York City there are 21 per cent of children between five and fifteen years suffering from undernourishment, and that condition is more or less common throughout this country. We have not had to face in the United States the appalling loss that Europe has faced because of its declining birth rate, a loss which the Registrar-General of England has estimated as amounting to twelve and a half million fewer births since the war began. That is the potential loss of life. We have not had to meet that yet in this country, but we have the same conditions that exist in Europe in two particulars: first, the threatened increase in our infant death rate and an increase in the number of undernourished children in this country since the war began. We have faced in a smaller degree all the big questions involved by the forcing of women into the industries. It is estimated that for every fighting man at the front there are four people back of the lines to keep him going. Of those four people, one is a woman. So, for every man we have had in Europe fighting we have had one woman in some industry in the United States helping to take care of him. Women who are married and who expect to give birth to children,—expectant mothers—have gone into industries and the mothers of young children have gone into industries. We do not yet know statistically in this country how that has affected our infant death rate. If the experience of other countries can be taken as a criterion, we have reason to believe that there has been a great increase in the deaths from congenital diseases in infancy in the

last year which may be particularly traced to this risk. You cannot have a normal infant life when you disturb and entirely change the habits of life of mothers, even in small measure.

We have in this country the same problems that Europe has had, and we have been singularly unalive to them. I am glad, as we are all glad from the bottom of our hearts, that we have given everything we could to the children of France and Belgium and to the children of Italy, but after we have given everything we could to these children, it seems to me that we are big enough and great enough as a nation to turn around and give equal attention and care to our own children.

The lessons of the draft are simply lessons we must all of us have known for a long time, and to which we have paid very little attention, but now that the reconstruction period has come, the lessons of the draft are going to be the starting point of a new world for children.

As I have said many times before, there are probably two things that seem more unrelated than any other two things in the world, and these things are war and children, yet it has always been war or the thought of war that has caused this or any other nation to pay attention to the welfare of children, and war has always borne more heavily upon children than upon any other part of our civilian population. We adults at home have never paid the price of war. Our children unwittingly have paid for it. All of our food conservation in this country has had little or no harmful effect upon the vast body of grown-up people. All of us are better off on account of it, but not so with the child. The increase in the price of foodstuffs has resulted in a change in the dietaries of children that will have a lasting effect upon their future. Mr. Hoover, some time ago, said that food conservation should not be practised upon children. While we have not done it voluntarily, a large part of our population has been forced to limit or change the diet of children and this has resulted in widespread undernourishment. It is not alone that our children are crippled or handicapped now as a result of this wrong-feeding, but unless something is done very soon to remedy the condition and bring them back to a normal state of health, we will inevitably, in the next ten years, be faced with a vastly increased tuberculosis death rate.

The draft bore out what most child hygiene workers have known for years. Six or seven years ago, Dr. Wood of Columbia University made a very interesting survey of the health of school children of the United

States. He found 75 per cent of them, both in rural and urban communities, were suffering from some preventable or easily remedied physical defect. He found an interesting thing at that time—that physical defects among rural children were much greater in proportion than the physical defects among the city children. This was so largely because most cities had systems of health supervision of school children, and some care had been given them. For the same reason we are finding today, generally speaking, the infant death rate in our rural communities is higher than it is in our cities. The cities have paid attention to that problem and the country has not.

It is not surprising that, five or six years ago, we found 75 per cent of the school children with preventable or easily remediable physical defects and that the same defects should be reported in the same group when they came to what is known as the "draft age", because they were practically the same children grown into manhood, who were called out by the first draft. We all know that in times of peace the standard for admittance to the Regular Army and Navy was extraordinarily high. Practically nothing less than a physically perfect man could be accepted. So, perhaps, it should not give us undue concern to know that during 1916, of the men who applied for enlistment to the Navy, 70 per cent were rejected because of physical defects. During the three years previous to our entry into the war, of all the men who applied for enlistment in the Regular Army, 78 per cent were rejected. The draft presented a somewhat different problem. We must remember that, in times of peace, it is possible that not the very best or most vigorous of our young men apply for enlistment in the army or navy. We are apt, I think in many instances to get men who have undergone more or less hardship and who consequently could not be considered in excellent physical condition. The draft, however, took a cross section of the most virile and vigorous age period we have. It made no exceptions whatever. It drew from every grade of society. Moreover, in the draft standards, the physical requirements were not nearly so severe as in the Army or Navy. We have had a separate classification of these men—men who were able to do some essential duties even if they were not equal to going out on the firing line. Men with physical defects have been accepted with the hope that these defects might be remedied as a result of camp life or on account of special physical care being given to them in the camps. Notwith-

standing these facts, the draft rejection figures are startling. They are figures which ought to make us stop and think. I have not been able to get a report of the total number of men who were examined or who were rejected because of physical disability but an inquiry has been made among the men who were sent to eight of our large camps. Of the number of drafted men, 29 per cent were rejected by the local boards because of physical defects and were not sent to camps. After reaching camp, 7.16 additional per cent were rejected. Altogether a total of 34 per cent of these men could not be accepted as being physically fit. These percentages are interesting when applied to the number of men included in this inquiry. Up to that time there had been 1,779,000 men drafted. Of this number 865,000 were rejected because of physical defects. The reasons for rejection were practically all physical defects which could have been prevented during childhood. I do not want to go over in detail the various classifications, but it is interesting to note some of the defects that could have been easily prevented.

The highest proportion were rejected because of eye defects or defective vision—21.6 per cent. Contrary to the general opinion, only 8.5 per cent were rejected because of defective teeth. I have been much interested in noticing that some of the reports from Europe state that the teeth of the American boys were in excellent condition. On the other hand, it was noted that many of the young men of Europe have bad teeth. Apparently, we have no cause to feel chagrined over the extent of dental defects because, compared with the young men of Europe, our young men seem to have made a good impression in this regard.

Diseases of the ear, which are very largely dependent upon adenoids and enlarged tonsils, or as a sequela to scarlet fever, caused 6 per cent of the rejections. From that on down the list we have causes for rejection such as heart disease, nervous diseases and tuberculosis which constitute a great group. These are all conditions which easily could have been prevented. There is hardly one of them that is not a disgrace and a serious reflection upon the care we give our children.

We are coming to realize now that children must be cared for throughout the entire period of their growth and not at one particular age. It is hard to tell in this country what the reaction of the war has been upon infant life, yet as an indirect result we have had a very high infant mortality in our cities during the past winter from res-

piratory diseases due to coal shortage. In March and April we suffered from a high death rate of babies because families were unable to get coal. In the tenement sections this meant serious room overcrowding and utter lack of ventilation. The result was an increase in the number of cases of broncho-pneumonia among infants.

Part of the increased baby death rate is due to the influenza, which is a by-product of the war. An interesting point about this death rate is that the babies did not die from influenza but from neglect because their mothers had the disease. I can speak with greater accuracy for New York City than for other cities. Up to October 5 of this year we had seven hundred fewer baby deaths than for the same period last year. About November 30 we had two hundred more infant deaths than for the same period last year. Between October 5 and November 30 we had nine hundred more deaths of babies than for the same period last year. This increase was divided almost equally between congenital causes and respiratory diseases, yet careful inquiry failed to show that these respiratory diseases were true influenza. They were broncho-pneumonia and the contributing cause of death seemed to be neglect. The children were not cared for as they should have been. In one week of October we had a greater number of infant deaths than we have had in any week since July, 1910. We have had an infant mortality which we supposed was past history. Philadelphia has had three times the baby death rate of the year before, Boston the same. In Chicago the infant death rate was very high indeed. This increase has come late in the influenza epidemic and seems to be almost wholly a question of lack of care. One reason which may account for some of the increase is that baby welfare work was stopped in many instances to give place to the emergency care of sick adults.

In New York we combined these two lines of work and had the baby welfare nurses take care of those cases of sickness that occurred in the families under their supervision. In that way we managed to look after the sick and yet did not wholly neglect the babies under our care.

The lesson we must learn from the draft will concern the future welfare of the children of this country. There has never been a time so opportune as the present for constructive health work for children. There has never been a time in the United States when that care was so

much needed as it is today. Ever since President Wilson said that "we are fighting to make the world safe for Democracy," I have often thought, in common with you all, just what "democracy" means. It seems to me that democracy includes the right of the child equally as much as it includes the right of the adult. While we are fighting to make the world safe for democracy, we must not be unmindful of our future citizens. Let us then build up a democracy which will result in absolute justice to all the children of the country, so that we may truly say, in this country at least, that we have made a democracy which is safe for the world.

DISCUSSION

Dr. Julius Levy, Newark, New Jersey: As Dr. Baker has pointed out in her remarks, there is a big opportunity before each State for work conducted along the lines of infant welfare, and there is no association that ought to appreciate it more than this. People engaged in public health work are altogether too modest in asking for appropriations from legislatures with which to carry on their work. I have found legislators who were considered apathetic about public health work to be very anxious for us to ask for larger sums of money with which to do the big things, otherwise they feel our efforts amount to little. Legislators are accustomed to thinking in large amounts, if they expect anything to be accomplished, and somehow they feel that our work is not worth bothering with unless we ask for appropriations such as they are accustomed to thinking about. Here is an illustration in point: Recently, in taking up some work in New Jersey, the Speaker of the House asked what our budget was going to be. I thought I was courageous when I said "we will ask for twice the amount we have had." We were receiving twenty-five thousand dollars. He said: "Nonsense; you should ask for one hundred and fifty thousand." I thought that was very fine and as I mentioned it to a member of the Legislature, he replied: "That man is crazy; you ought to ask for three hundred thousand."

THE MINNESOTA PLAN FOR THE ESTABLISHMENT OF INFANT WELFARE CLINICS IN SMALLER TOWNS

E. J. HUENEKENS, A. B., M. D., Minneapolis

The Division of Child Conservation of the Minnesota State Board of Health has been in existence for six months and while it is too short a time to make any deductions as to its permanent value, sufficient progress has been made to evolve an organization and to prove that there is a demand for such service. In some ways our methods are unique and our experience may help other states contemplating the creation of a similar division.

About one and one half years ago I was called to Little Falls, Minnesota, to attend a sick baby. The nurse in attendance had had many years experience in the Minneapolis infant welfare clinics and, in true infant welfare style, was not limiting her services to the particular baby in her charge, but was giving advice to other poorer babies of the neighborhood. When I arrived she had gathered seven or eight of these babies for me to examine; in fact instead of seeing one patient I found I was conducting an informal infant welfare clinic. The condition of these babies casually gathered together, opened my eyes to the crying need for such work in the smaller towns. After consulting with public-spirited local people, I offered to return and conduct a formal infant welfare clinic. I was careful, however, to arrange a preliminary meeting with the local physicians and obtain their co-operation. They were rather skeptical but offered no active opposition. The clinic was a marked success, many babies being brought in from surrounding towns and rural communities. At the earnest solicitation of the Little Falls Civic League, I continued to conduct these clinics at three month intervals; the follow-up work being done by the local community nurse, who had also been one of our Minneapolis infant welfare nurses. The clinics were such a success that I cast about for means of making them permanent and extending them to other towns of the State. A separate organization seemed inadvisable but no existing associations took any interest until Dr. Bracken, Secretary of the State Board of Health, hearing of these plans proposed that his Board take up the work. Through

him an effort was made to obtain appropriation from the State Safety Commission, on the ground that this was a war measure, but the effort did not succeed. Dr. Bracken then decided to carry on the work on a small scale, with some special funds at his disposal, until the Legislature could make a separate appropriation for this purpose.

In June, 1918, at a meeting attended by all the pediatricians of the State, it was recommended that the Division of Child Conservation of the State Board of Health be established and infant welfare clinics begun in the smaller communities of the State. Well organized clinics had been in existence for a number of years in Minneapolis, St. Paul and Duluth, so that these places did not have to be considered. At a meeting of the State Board of Health in July, 1918, the Division was formally organized, the writer being made Director, two full-time nurses assigned to the work and an advisory commission appointed. This advisory commission was modeled after a similar body in Massachusetts and consisted of the following as ex-officio members: the President and Secretary of the State Board of Health, Dr. Egil Boeckmann and Dr. H. M. Bracken; the Secretary of the Child Welfare Division of the State Board of Control, Mr. W. W. Hodson, and the Director of the Division, Dr. E. J. Huenekens; the other members being a pediatrician, Dr. J. P. Sedgwick, an obstetrician, Dr. J. C. Litzenberg, and five other prominent men and women of the State, especially interested in child welfare.

METHOD OF ORGANIZING CLINICS

It was deemed advisable to establish clinics only where there was a local demand and some kind of local organization which could make the preliminary preparations. Fortunately the weighing and measuring of children, initiated by the Children's Bureau at Washington, had preceded the work of our Division and, while it had been of great value in awakening interest in child welfare, it was the consensus of opinion of physicians and the Children's Year Committee, that some sort of follow-up work must be done. Our proposed clinics seemed to meet the requirements exactly and we had the heartiest co-operation of Mrs. T. G. Winter, Director of the Woman's Committee, Council of National Defense, and Mrs. J. G. Swan, State Chair-

man of the Children's Year Committee. Mrs. Swan repeatedly urged her county chairmen to take advantage of this opportunity and establish infant welfare clinics in their districts. We soon had almost more applications than we could handle. Our method of procedure is as follows: when a request for a clinic is received, the head nurse of the Division, Miss Frances Brink, visits the community, explains the object of the work, advises what is necessary in the way of equipment, meeting place, volunteer assistants, etc., and a day is set for the clinic. The advertising of the clinic is left to the local people and consists of notices in the newspapers, posters, announcements in the churches and schools and occasionally by block workers in a house-to-house canvass. On the day before the clinic, Miss Brink again visits the community to make sure that all preparations have been made. In a letter to the local physicians, inviting them to attend the clinic the Director has carefully explained that healthy babies, as well as sick ones—up to the age of five years—would be received, though children over that age would not be excluded; advice would be given as to proper diet, especially as to the value of breast feeding, and directions as to clothing and general hygiene; if any pathological conditions, requiring medical or surgical care, were found the patient would be referred back to the family physician for treatment. So far as we have gone I wish to say that, while we found many physicians suspicious of our enterprise, when they discovered that the clinic was aimed at prevention and was, in no sense, a free dispensary, their suspicion was disarmed and we received their hearty co-operation.

On the day of the clinic, in every case conducted by the Director himself, five or six volunteer workers are on hand to assist the nurse in weighing the babies and in taking a preliminary history on blanks furnished by the State Board of Health. The babies are then examined and the necessary advice given; a complete record being kept, which is accessible to the family physician. At the close of the clinic an address is given, explaining the plan of the work, dilating upon the necessity of it and announcing that the clinics will be conducted at two or three month intervals only upon the condition that the community employ a public health nurse to do the follow-up work.

Clinics have been held in five different towns; Little Falls, Wheaton, Thief River Falls, Sauk Center and Waseca; definite ar-

rangements have been made for clinics at Moorhead, Brainerd and Crosby; plans were well under way for clinics at Winthrop, Fergus Falls, Cambridge, Hastings, South St. Paul, Robbinsdale, Cloquet and Granite Falls; requests for clinics had been received from International Falls, Sleepy Eye, Aitkin, Chisholm, Blue Earth, Litchfield, Olivia and Mountain Iron. The work was just getting into full swing when the influenza epidemic put a temporary stop to all plans. The epidemic is now abating and work will be resumed early in January.

Until the next Legislature meets the plans are on a temporary basis—the Director being paid per diem, and two full-time nurses employed. The budget to be placed before the next Legislature, which meets in February, calls for a Director, on a half-time salary, an Assistant Director, on a full-time salary, three full-time nurses and a stenographer and clerk, a total of \$15,000 per year.

One of our difficulties is to obtain nurses with public health training for these communities. The University of Minnesota and the Minnesota Public Health Association are now co-operating and have established a special four months course in public health nursing for registered and senior nurses. Until we have sufficient graduates from this course we propose to have one of our nurses spend several weeks initiating the new community nurse in her duties.

The important question arises as to whether ultimately, these infant welfare clinics should be left entirely in the hands of the local people and be conducted by local physicians. In one of our larger communities—Mankato—as an experiment, arrangements have been made for the State Board of Health to organize an infant welfare clinic but to have it conducted every two weeks by two local physicians who are especially interested in pediatrics. This plan was adopted, at our suggestion, at a meeting of the Mankato Medical Society, the other physicians assenting to and approving of the arrangement. How this is going to work cannot be prophesied; but to make a similar arrangement in smaller communities would, I fear, be inadvisable. In the first place, physicians in such smaller communities, as a rule, have insufficient training in pediatrics and take very little interest in the work. In the second place, the clinics would have to be conducted either by all of the physicians, with a consequent lack of personal responsibility and subsequent loss of interest; or one phy-

sician would have to be singled out which would result in jealousy and suspicion on the part of the others. I realize fully that in Massachusetts an effort is being made to decentralize the work and stimulate local communities to organize their own infant welfare work. Massachusetts is, however, a manufacturing state, with a number of large industrial centers, while Minnesota is essentially an agricultural state, with very few large towns. Moreover, it seems to me that this work falls in the field of preventive medicine and as such is as much a function of the department of health as epidemiology. The ideal solution for the future would be the establishment, in every county, or even smaller units, of full-time health officers, trained in infant welfare work, as a part of their public duties.

DISCUSSION

Dr. Dorothy Reed Mendenhall, Washington, D. C.: I do not think we should let this interesting contribution in regard to the work they are doing in Minnesota pass without discussion. It is particularly interesting to me. The Minnesota plan seems to be the one best adapted to the large middle west states, and possibly to other areas. It is a new departure in child welfare work for the state boards of health, and in some way answers the question as to what form our reconstruction work should take. One of the things that is most urgent today is that we should have a child hygiene department in every state board of health. We have now practically eleven such divisions if you count Massachusetts and Louisiana, where they are called by different names or come under the Division of General Hygiene. It is an important contribution, and if we have a child hygiene division in every state board of health it may be possible to accomplish a good deal in rural districts by such work as Minnesota has mapped out. The Minnesota plan is a most interesting and stimulating conception, and I am sure the idea will be enlarged to include prenatal clinics in rural communities under the same administration.

Dr. Julius Levy, Newark, N. J.: In New Jersey we have a plan somewhat similar to that stated by the essayist, and a problem somewhat analogous in that we have a large rural population, although we have a number of large cities.

I believe very strongly that the supervision of child hygiene work should be left in the hands of the state, not so much because smaller communities may not be able to develop men and women with ability, but because child hygiene work requires a great deal of organization and the development of resources that no small community is likely to, or can afford to develop, first for the reason that the problems do not appear in sufficient concentration or number, and second, because if an attempt were made to meet each special social and economic problem, the expenses would be too great.

We can find an illustration of this idea in handling the problem of the unmarried mother.

It is practical for a state to elaborate organization for the proper handling of this problem and give the benefit of the machinery to each community, while if each community attempted to develop the machinery, it would be more costly. This thought applies to other questions and problems that arise in child hygiene work, such as sanitation, complete birth registration, the reporting and detecting of contagious diseases and the proper attitude towards the employment of women in industry.

We have also been impressed by the fact that a state department could more quickly create a uniform standard of efficiency in the various communities through state supervision, provided this supervision were extended and applied to private organizations as well as public work. This is the idea that is influencing our work in New Jersey, where we intend to establish a uniform system of child hygiene work throughout the State, giving each community and each nurse, whether she be employed by a private society or a public department, the benefit of the organization and administration and supervision of the State Department of Child Hygiene.

In regard to what the speaker has said about not employing local physicians in the small communities for child hygiene work, I feel that Minnesota is likely to make a mistake, although I appreciate the fact that it is easier to send trained city physicians to small communities, and that in the beginning the work at the stations will be better done. It is to be remembered, though, that the care of the mothers and babies in that community depends upon the character, intelligence and training of the local physician, and not upon the physician who may visit the town once in two weeks or once in two months. We, therefore, are arranging to have local physicians conduct the consultation stations, believing that after they have done this work for a while the additional knowledge they obtain will permanently benefit the profession in the community.

Miss Minnie H. Ahrens, Chicago: In connection with the Minnesota plan in which I have been much interested, I want to tell you of the plan which was tried out by the Infant Welfare Society of Chicago. A child welfare committee in a community in Michigan asked our help in arranging an exhibit and in showing something concrete in the way of infant welfare work. We helped with the exhibit and then we recommended that we make a demonstration of the possibilities of infant welfare work by sending a physician and a nurse who understood how to conduct mothers' conferences or consultations and to show them just what they might do in their own community. That exhibit and demonstration resulted in the establishment of one station and later on, in the opening of another station in the town. The problems which have been suggested as to the use of local nurses and doctors came up there, but we recommended what Dr. Levy has just said regarding a physician, namely, that they select one or two men in the community. This community has been working now for a little over a year and a half, with very good results.

As to the question of nurses, we know there are not enough public health nurses at present, but I think the outlook is encouraging because after the experiences of the last year in war work and in public health work, I believe that a large percentage of women who were doing other things when they went into the military service will wish to go into public health work when they return home. We had only approximately six thousand public health nurses when war was declared. A large field is going to open up for nurses, and we are going to have a great many more public health nurses in the future. During the last year, communities have been aroused to the need of public health nurses to a greater extent than ever before, and they are quite ready to spend money toward their training. I have been associated with the Red Cross during the last year, at the Central Division Headquarters, and within the past few months especially have had an opportunity of seeing the attitude of some of the people in rural communities in regard to public health nurses. Within the last week requests have come from six county Red Cross chapters for community nurses, and to each one I have said, "We are short of public health nurses, but what you can do is to spend your money to prepare nurses," and they have agreed to do so.

Perhaps it would be interesting for you to know that here in Chicago the American Red Cross Chapter appropriated \$15,000.00 to be used in connection with the Public Health Organization and School of Civics and Philanthropy to give a three or four months' course to student nurses. While we are still short of nursing service, we are looking forward to and making ready for the time when we are going to have more nurses to do this big piece of work which is opening up to all cities.

Dr. E. J. Huenekens, Minneapolis (closing): In regard to the prenatal clinic, I wish to say that is briefly our plan for the future. We have an advisory obstetrician on our advisory commission and that work will be taken up very readily in connection with the postnatal work. One of the by-products of this new division is its co-operation with the Child Welfare Division of the State Board of Control, which looks after the rural and sociological aspects of children, illegitimate children and dependent children in the State of Minnesota. This board has full charge of the licensing of maternity hospitals and children's homes in our state; we have been asked to co-operate with this board so that, in the future, all of these baby homes will be licensed by the State Board of Health and the State Board of Control. They will have to be inspected by our Division and we will be able to look into the question of diets of the children and whether breast feeding is being kept up by proper methods and so forth.

I have given much thought to the question as to whether local physicians in the smaller communities can take care of these clinics. I feel rather strongly, however, from my personal experience in dealing with them and getting their viewpoint, that it will not be a success. They simply cannot and will not put into this work the proper enthusiasm which is required to keep it up year after year. In New Jersey they must have a different type of physician than we have in the rural communities of Minnesota.

As regards pediatrics and recognizing the value of breast-feeding, our physicians in rural communities are behind the times. We find it a harder task to educate physicians in rural communities than the laity on such questions as breast-feeding. To leave the clinics in the hands of such men, I think, would be a mistake. One thing we will do is to educate physicians by means of these clinics. A number of physicians will attend the clinics and will get a proper viewpoint as regards the value of breast-feeding. Perhaps in the future we can leave these clinics in the hands of local physicians, but it will be in the distant future.

THE MAINTENANCE OF PHYSICAL AND MENTAL HEALTH OF ADOLESCENTS AS A FACTOR IN THE REDUCTION OF INFANT MORTALITY

DISCUSSION

The Chairman: We have done much to care for the expectant mother and to care for the child after birth, but we have not done very much to prepare the potential mother for the motherhood she will experience. I have no doubt there are persons here who have given this subject thought, and if there are any such we will be glad to have them open the discussion on the subject.

Mr. George R. Bedinger, Detroit, Mich.: It seems to me, representing the Children's Aid Society, which recognizes the importance of keeping our children well, that a recital of some of the work that we are doing in Detroit might be of interest in connection with this very interesting subject. We have in Detroit four hundred and fifty dependent children under the care of our organization. Their ages range from six weeks to perhaps sixteen or eighteen years. We feel that while these children are in our care they should get just as good physical care as possible; that we should place them in as suitable surroundings as possible.

Last March I got my directors to approve of the appointment of a medical supervisor on a salary, the first time that an agency like this in that part of the country had recognized the fact that if you want to get the best kind of medical supervision you must pay for it. One of the best physicians in Detroit was appointed, Dr. Worth Ross, Director of the Division of Child Hygiene of the Board of Health. Dr. Ross outlined our medical policies, and made medical contacts tactfully and quickly for us, and he came to our building at least once a week and met with our entire staff of field workers, and gave investigators and visitors a medical view of the problem of child welfare, which many of us did not have, there being only one trained nurse on our staff. This plan has developed so that last month we made many changes in our medical supervision.

We are going to keep our children well if we can in three distinct ways, all of which we will pay for. First, we have assisting our medical supervisor

who is now Dr. B. Raymond Hoobler, Director of the Children's Hospital, a number of pediatricians on our staff. If any of our children are sick, they are visited in the home by a physician and two dollars a visit is paid for that service, about one-half or less than half of what that service is worth, but still it is recognizing the fact that doctors cannot afford to give their services for nothing. If our children get a cold or have some other slight trouble which may develop into something serious, we have them taken to a physician's office and for that service we are to pay one dollar per visit. In addition to these two methods of medical supervision and care we have in our office, which is in the Central Charities Building, a clinic for well children. This clinic is held every week for two hours in the morning. At that clinic one of the staff physicians who is a pediatrician and interested in social work attends. Babies are brought to the clinic to see if their feedings need to be regulated. New children are examined and their physical charts are made out. This means that our own children are not subjected to the risk of contagious disease by being taken to the promiscuous clinics throughout the city, good as they may be. It means that when our children are seen, they are examined by a physician who is particularly interested in our work and problems, who will fill out the medical forms intelligently, which we cannot always get a busy board of health doctor to do. The time of our workers, which is expensive, is greatly saved. For this service of two hours each week we are paying ten dollars a week. This is only a beginning. I think it is going to teach us the importance of the physical care of our children. Children under the care of an organization like ours should receive the very best kind of medical care as well as the best possible social supervision.

SESSION ON ¹ NURSING AND SOCIAL WORK

Chairman, MISS ESTELLE L. WHEELER, R. N., Washington

HOW TO CONDUCT A SURVEY IN THE INTEREST OF CHILD WELFARE WORK

PANSY V. BESOM, R. N., Boston

At the last annual meeting of the Association, held in Richmond, Va., October, 1917, the formation of the Child Conservation Committee of the Massachusetts State Department of Health and the objectives of the Committee were discussed in detail. Therefore I will state very briefly for those of you who may not have been in Richmond, the plans for the year as outlined by the Committee.²

On May 26, 1917, Dr. Allan J. McLaughlin, the Commissioner of Health of Massachusetts, appointed from the State Department of Health a Committee on Child Conservation, consisting of three members. He appointed also at the same time an advisory committee. The distinction between the Committee itself and its advisory members was never severely drawn and the actions of the joint body have been final.

The composition of this Committee is significant as representing the various factors of child conservation and the different methods by which any program could be put into operation. There are two pediatricians, one obstetrician, one public health nurse, two physicians especially interested in problems of delinquency and feeble-mindedness, the Director of the Civilian Relief of the New England Division of the Red Cross, and a member of the Women's Department of the Council of National Defense.

The Committee planned to make a survey of every city and town, of every village and hamlet in the State. This survey would include an exhaustive study of the mortality and morbidity statistics of children under the age of five years. Having thus disclosed unquestionably the conditions, they planned a series of public meetings where they proposed to name the remedy.

¹The report on the Progress of Children's Year, which was presented at this session by Dr. Anna E. Rude, is to be found on Pages 59-64, of Part 1.

²This report is, of necessity, a compilation of the annual reports written by various members of the Child Conservation Committee.

The most important factors in child conservation are prenatal care, obstetrical care and infant feeding. The Committee felt that this survey would disclose the fact that deaths in early life are due to the failure of people to secure proper care in these fields of medical work. It was assumed that the well-to-do would always be in a position to secure competent, continuous medical care. So provision must be made for the rest of society to conserve life and thus increase our man power.

For many years there have been many excellent agencies engaged in baby welfare work, but these agencies have for the most part been located in the larger cities and towns. It was planned to stimulate the establishment of similar agencies in localities where little or no work was being done, so that in every square foot of Massachusetts every expectant mother would be guarded from the beginning of her pregnancy till the birth of her baby, the baby would be supervised during the early period of life, and as this baby advanced from infancy to childhood opportunities for continuous competent medical care would be provided throughout the State. This program meant the creation of prenatal clinics where expectant mothers could be supervised; free hospital beds where pregnant women could have competent obstetrical care; milk stations where mothers could be assisted in the problem of infant feeding; and well-baby clinics where the growing child could be supervised and trained into a sturdy youth.

Such was the program for the year's work. How to carry it out was the next step. A public health nurse was appointed for each health district in the State, and an additional nurse for Boston. These nurses were selected with the greatest care, and all of them had had not only public health training but a considerable amount of experience in actual public health field work for children.

In making the surveys the nurses have visited the representatives of the boards of health, the child welfare agencies, the visiting nursing associations and other private or church organizations which were doing child welfare work. They have received also information by personal investigation concerning the actual work being done by these organizations. From these facts the nurses have made to the committee certain suggestions for development of the work which seemed to them desirable in that particular community. The survey made by the nurse, together with the recommendations, has been sent also to the District Health Officer, who has made whatever comments he saw fit and then forwarded it to the Commissioner of Health.

A copy of the District Health Officer's letter has also been sent to the committee. At the meeting of the Committee at which the nurse who has made the survey has been present, and frequently also the Health Officer of the District, the survey of the town, with the recommendations or whatever personal report the nurse or the Health Officer might give, has been considered, and a specific program for that particular city or town has been outlined. A letter written by the Committee has been sent to the community, stating the program and urging its adoption. The Commissioner of Health at the same time has written a letter to the local board of health in that town or city, urging its co-operation in putting the plan into operation.

The recommendations of the Committee and the Commissioner have called sometimes for an extension of the work already being done by the local boards of health, or the undertaking of new work by this Department. Sometimes they have called for the addition of more nurses by the Visiting Nursing Association or the reorganization of that body. Sometimes they have called for the providing of free obstetrical beds in hospitals, and sometimes for the extension of prenatal care, or the undertaking of such care where none had been given. The Committee has invariably urged the supervision of well children from birth up to five years of age. Not infrequently it has recommended the establishment of prenatal and well-baby clinics. It has sometimes urged that hospitals provide out-patient departments to which sick children could be brought for treatment.

The Committee has insisted in every instance on the necessity of special training for nurses who do public health work, and has urged the Department of Health and the Visiting Nursing Associations to make every effort to secure well-trained public health nurses to do this kind of work.

The Committee has tried to stimulate local publicity both for the raising of funds to carry on the work and for the awakening of interest in the importance of child conservation. This has been done by letters and by distribution of literature; also many public meetings have been arranged where talks have been given by several members of the Committee.

At the beginning of the work the Committee planned to include all parts of the child conservation work, i. e., infant care, school hygiene, juvenile delinquency, child labor, day nurseries, etc. It was impossible to cover this entire field adequately and so it was decided

for the first year to consider only the care of the child up to school age. The usual procedure has been departed from in many instances where the other problems were closely linked up with this portion of the work.

An important feature of the work has been the organization of local child welfare committees under the Woman's Department of the Council of National Defense. This Department was organized in the summer of 1917 to co-operate with the Child Conservation Committee of the State Department of Health in carrying out its program. A child welfare committee under the local unit of the Council of National Defense was therefore formed in every town to work with the child conservation supervisors and to carry out, in co-operation with the local boards of health, the recommendations of the State Committee. The value of these local committees has been inestimable and much of the success of the year's work has been due to their efforts.

In February, 1918, the Child Welfare Department of the Federal Council of National Defense and the Federal Children's Bureau issued a program for children's year, designed to be carried out by the State Child Welfare Departments. The first part of this comprehensive plan for child conservation dealt with problems of infant mortality and child hygiene, and the program presented was almost identical with that already being carried out in Massachusetts. The national plan, however, urged that, as a basis for permanent child welfare work, a physical census of all children under five years old be taken by a national weighing and measuring test.

The work has been hard and it sometimes appeared to be an uphill job, but, as one of the supervisors stated in her report, "there is a feeling of infinite satisfaction in having participated in this pioneer child-saving campaign in Massachusetts." And there is a still greater satisfaction in seeing the results, which have so far exceeded our expectations.

The recording of results accomplished is difficult because a large portion of the return comes in an intangible form.

Positions have been created for 46 nurses as a result of the movement, while 30 child welfare stations and 8 prenatal clinics have come into existence. The amount of money raised by private organizations and municipalities is \$53,930, with \$11,500 fairly sure to be appropriated within the next few months. This sum does not include expenditure for the support of child welfare stations and sick and well baby

clinics, nor can the additional work which many of the existing agencies have assumed without increasing their forces be reckoned in dollars and cents. Furthermore, the success of the campaign cannot be estimated alone by the amount of money raised and the number of nurses placed. The conferences with the local committees, boards of health, social agencies, etc., the talks given before women's clubs, mothers' clubs, Red Cross societies, district nursing associations and the like, all tended to educate the public and to stimulate a general interest in child welfare, the results of which cannot be measured.

The public health nurses throughout the State have shown a splendid spirit of co-operation, and have been at all times ready to accept any new program which the supervisors laid before them, and eager to assume any new duties which the study of conditions showed to be necessary for the saving of child life.

The local boards of health have been most courteous and helpful. The child welfare committees of the Women's Council of National Defense have co-operated and paved the way for the supervisors in almost every community.

The weighing and measuring program issued by the Children's Bureau was approved by the State Committee and was carried out by the local child welfare committees with the active assistance of the child welfare supervisors. Record cards and printed instructions were supplied by the Children's Bureau and each committee was instructed that the value of the test lay in the thoroughness with which plans for permanent follow-up work were carried out. Of the 354 cities and towns in the State, 140 have carried out the test. This number included all the larger cities and covers 89 per cent of the population.

The Child Conservation Committee has co-operated with the State departments of Education and Health and the Child Welfare Department of the Women's Council of National Defense in urging that short courses on child welfare be introduced into vocational schools, and that in places where such schools do not already exist they be established. Letters were sent simultaneously from these Departments to their local representatives, asking them to co-operate in this effort. An outline for a course of twelve lessons on child welfare, with suggestions for exhibits and demonstrations, has been prepared by these joint departments.

It is the unusual community which needs more than to have proved

to it that it is really failing to care for its children. Most cities believe they are doing all that can be done or all that can be financed. A striking example of such belief has been shown by one of the supervisors in her report. She says:

For ten years in one of the cities with a population of about 125,000, special consideration had been given the problem of child life. As a result of this intensive work the infant mortality rate had steadily decreased, and the rate recorded against 1916 was 167. The figures for 1917 showed an infant mortality rate of 179, or a rise of twelve points at the end of eight months of war. Could there be any more spectacular effect of war upon the child life of the city! The usual number of agencies was at work doing the usual kind and amount of work. The unusual factor was the war. The men had been drawn by the draft, and for two reasons many of the women had returned to the looms. One group had done so because the support of the family had fallen on them, and the other group had gone from choice because wages were unusually high and they liked to get back "where there was something doing." Then, there was the mother of nine children who went back to get rested, leaving her brood in a day nursery.

The first local reaction to the State's request to meet this tragic situation brought forth the assertion that there was no money in sight to extend the work. Later on a full realization of the destructive effect of the war upon the children of the city was considered. As a result, the local committee started a campaign to raise money, and notwithstanding the many demands for funds previously made upon the public, \$6,000 has already been banked, three additional nurses have been floated to specialize with the child, and the committee is still at work.

Other cities have responded in like manner. In one instance the city council voted to assume all responsibility for child welfare work, and the board of health was authorized to spend a sum sufficient to cover the expenses of a supervising nurse and three assistants.

Three large towns some distance out on Cape Cod have, as a result of the State's program, united their efforts to form a rural visiting nursing association. Each village in each township is to have a small local committee, the chairman of which committee is to be a member of a central board of directors, which will also embody in its composition other representative people of the towns. The plan calls for a budget of \$6,000 for the first year. Intensive work with the child will begin in the prenatal stage, and be continued during school life. The plan also includes a health center with a small surgical clinic, and the development of any other health work that the territory may need. The money to support this work is being raised from private funds.

These are only a few examples of the way in which communities have responded to the State's appeal.

This method of carrying on child conservation work has demonstrated a workable method of co-operation between public officials, private organizations and individuals, and has proved definitely that everywhere people are easily aroused to the importance of conserving the child life of the nation. It is certain that never before in Massachusetts has there been such widespread interest in child welfare work.

SUMMARY OF YEAR'S WORK

Number of committee meetings held.....	65
Number of supervisors' meetings held.....	11
Number of talks given by members of committee.....	62
Number of talks given by supervisors.....	258
Estimated number of persons reached.....	18,406
Amount of money appropriated by cities and towns.....	\$25,680
Amount of money raised by private organizations.....	28,250
Total	\$53,930
Amount of money fairly sure in prospect.....	11,500
Total	\$65,430
No accurate figures available for money raised for support of clinics.	
No accurate figures available for money raised for weighing and measuring children.	
Number of nurses actually employed.....	31
Number of nurses authorized but not secured.....	15 46
Number of nurses fairly sure to be placed.....	— 5
Total	51
Dietitians employed for child welfare work.....	2
Liberty Milk Shop opened (Boston).....	1
Children's Cottage (Boston Common).....	1
Number of child welfare stations opened by municipalities.....	6
Number of child welfare stations opened by private organizations..	24
Total	30
Sick-baby clinics opened by hospitals.....	1
Sick-baby clinics opened by municipalities.....	1
Total	2
Number of prenatal clinics opened by hospitals.....	3
Number of prenatal clinics opened by private organizations.....	3
Number of prenatal clinics opened by municipalities.....	2
Total	8
Population of Massachusetts, 1917.....	3,849,006
Cities and towns in Massachusetts.....	354

SUMMARY OF YEAR'S WORK—CONTINUED

	Number	Per Cent of Total	Population	Per Cent of Total
Communities surveyed	220	62	3,564,024	92
Communities visited but not surveyed..	22	6	69,547	2
Communities not visited nor surveyed..	112	32	215,435	6
Totals	354	100	3,849,006	100

It is to be understood that the foregoing statements deal only with that phase of the child conservation work of the State Health Department participated in by the Child Conservation Committee. In addition to this, the Division of Hygiene maintained a traveling exhibit in charge of two nurses who gave talks and demonstrations throughout the State on the various phases of child welfare. A lecture service with stereopticon slides and moving pictures was a regular feature of the work, as was the use of baby books, prenatal letters and newspaper publicity.

RURAL COMMUNITIES

(Joint Session with the American Public Health Association)

Chairman, DOROTHY REED MENDENHALL, M. D., Washington, D. C.

Dr. Mendenhall: In her address last night, Mrs. Putnam stressed particularly the need of work in rural communities and made that one of her points for development during the next year. This is a subject I am particularly interested in and the development of which we are all watching very keenly. It is comparatively new work. Only four years ago a statement was made before this Association regarding insufficient obstetrical care in cities of fifty thousand inhabitants. Our state has only one city of over fifty thousand, and two million and a half of the people live in small cities in the country and are apt to be doomed to bad obstetrical care and to a lack of infant and child protection. The developments of the last year added to what we knew four years ago, show how necessary it is that we rise to the occasion and grapple with this problem until it is solved.

In this connection the results of Children's Year are of especial interest in one particular—that is, the number of public health nurses put in the field, and in the number of child health centers or children's clinics that have been established in rural communities and in small towns. Dr. Rude described this feature of Children's Year fully yesterday, and I am only going to allude to it here. We have a resumé prepared every week at the Children's Bureau from the letters received on child welfare, and from press clippings, so that we may be kept well informed on the development of such activities. A bulletin is published weekly showing the increase in public health nurses and the increase in infant welfare centers. Massachusetts has a brilliant record of forty-six nurses, with an appropriation with which to pay them, although they have not been able to fill all the places. There are five extra nurses, making fifty-one in the field this year in one state. That is a standard of which we may feel proud. Kansas, New Mexico, Florida, Colorado, Oklahoma, North Dakota, Indiana, Nebraska and Oregon have reported recently that they have public health nurses in the field; in Indiana the rural township of Marion is to have rural child welfare, and a trained worker has been appointed to assist the public health nursing service throughout the state. One county in Oregon has employed a public health nurse, and three counties in Nebraska are planning for county public health nurses and have made the necessary appropriations for them. This news comes into us from week to week; they are not all repetitions because we keep track of how many nurses are placed. From what I have said you can readily see that great strides have been taken toward the solution of the problem of public health nursing.

PROBLEMS OF INFANT AND MATERNAL WELFARE WORK IN RURAL COMMUNITIES

MISS KATHERINE M. OLMSTED, R. N., Chicago

Diagnosis is the larger part of any task or in dealing with any problem. Given a sound diagnosis, to find the treatment is largely a matter of time and persistence. Without this accurate diagnosis the results of treatment on a conjectural basis are a matter of chance.

I take it that in a conference like this we are largely defining and diagnosing problems. Hence it would seem that each of us is justified in looking only at the problems which come within his own immediate field of study. The problem given me this afternoon is "Maternal and Infant Welfare Work in Rural Communities."

The main part of the progress in thinking consists in finding new ways of putting old ideas. The rural problem is an old idea. The approved method of applying treatment has not materially changed and yet conditions have so changed within the last two years that we are forced to consider this question in an entirely new light.

We still believe that in some way to these rural mothers we must take knowledge and education. Better and easier access to obstetrical and peditrical care will result. Our greatest problem, therefore, is the best way to provide health teachers for the rural mothers and fathers. Health teachers need not be scientists. The laws of health, like the laws of astronomy, must be understood, propagated and obeyed to secure beneficial results. The physician, unless he is connected with and especially interested in social effort,—and the rural physician seldom is—has no spare time for social teaching or dealing with the problem of ignorance which has been pointed out as the chief cause of maternal and infant mortality. The teaching has fallen into other hands. The physician has indicated the problem, has diagnosed the case, and now others are needed to work it out in conjunction with him. It has been said that our doctors are as a rule as good as any in the world, probably the best in the world; but a doctor not called in, or called in too late is about as useful as a fire engine when no notice is given of a fire. What we need is a better system of fire signals; then the engine can get to work.

To gain the proper diagnosis for our rural problem we must take a social history; we must not remain blind to the causes which produce the evils we are fighting; we must apply our efforts where they will do the most good. Ex-President Roosevelt has said the needs of rural life are "better farming, better business, better living."

The first two points have been cared for by the men of our nation and if let alone will probably progress satisfactorily. But better living is a condition largely controlled by women, and a condition which is all important in the problem of maternal and child welfare. The *economic condition* of the *rural home* must be improved and so arranged that the parturient woman is able to stop her work short of the point of fatigue. Through the entire problem runs the strain of *educate, educate, educate*—a much overused word but unused method. Problems they must know for the sake of living—results of which work out in terms of sanitation and civics. The application of which can only be made effective by organization.

The whole task of reorganizing the conditions of agricultural labor, wages, rents, rates, etc., is extremely difficult and complicated. But never before in history has the help and encouragement of the whole world been so lavished on the farmer as today. The agriculture of the past scarcely deserves the name of an industry. It was without organization, without standards, without a scientific or a rational basis. It had no standing among other industries because of lack of scientific methods and business organization. The very name "farmer" was a term of reproach applied indiscriminately to the uncouth and ignorant members of society. Many farmers accepted this estimate of themselves and regarded with distrust anyone who attempted to improve their condition. But a great change has come about, largely due to the interest of our universities, and to an effort to increase food production. The leaders in agricultural thought have pushed forward the work of agricultural extension until it has become a great force in field operation carrying to the farmer's door the results of teachings and the investigations of the colleges and experiment stations.

But other factors in the development of the rural people have scarcely been touched upon, factors far more difficult of control than those relating to food production. Few of the great industries have such a peculiar social problem. Rural life lacks the attractions which appeal to the young human nature, and even after all that has been

done to improve farming the constant drift away from the country into cities is true in our best states and the proportion of foreign tenants on farms is rapidly and constantly increasing. How large a part in this human tide of farmers coming into the cities is due to the women is hard to tell—but undoubtedly a large part of it. In a small town in a mid-western state where the greatest part of the population was composed of retired farmers, an inquiry was made and it was found that of 110 farmers questioned, 92 of them said the wife and children wanted to live in town; 72 of these wanted better schooling for children; 90 of the 92 wives said they were worn out with hard labor. The lack of help and the inability to get proper medical care for themselves and children played a large part in the stories of all.

Better living conditions will mean less isolation, better social conditions, better amusements and better health protection, and I believe the time is coming soon when women will be relieved from the drudgery that is sending them to the insane asylums for they are fast becoming the leading spirits in the social centre work; they have joined the Red Cross and are on various committees for the Council of Defense.

In every community there have been men and women who have had thoughtful and serious ideas for the development of their neighborhoods, but who through the inertia of their own habits and the drag of existing customs have been unable to initiate any effective enterprise for the good of the community. Our problem has been how to break this inertia and start the leaders upon their tasks.

The alleged facts about the increase of tenancy in this country are no doubt correct enough. Let us agree that the census is right and that tenancy is increasing at a rapid rate, that farms are being worked more and more by families who do not own the farms, more often foreigners; we must recognize that a large per cent of the tenants are as a rule a poor class, in debt up to their ears for horses, groceries, seeds, implements, fence wire and the doctor, and that the children are kept out of school months at a time to help with the work. The wife and mother often ranks in intelligence with our foreign mothers in the cities. These are deplorable facts about tenancy, and the resemblance is growing between what *is* happening to the small farm owner and what *has* happened to the small shop owner.

Years ago the people who now work in factories were often independent producers. Then came organized industry with capital and

swept them out of ownership and into jobs. It was hard no doubt for men who had been engaged in manufacturing in a small way at home or in little shops to be put out of business with their children and grandchildren, taking such employment as could be had in factory towns. But it had to be and we now have our large industrial system. After a while a great many farmers, first becoming tenants, and later they and their descendants' employees will be in the same economic class with present factory employees. The farm workman, like the factory workman, will not own the business, but he will take orders. There will always be a few farmers who work their own farms, but the factory type of estate will dominate in agricultural production unless all signs fail.

The country population will correspond in status with the factory population in proportion of employees to owners—living conditions, etc. Rural public health problems are already beginning to assume the same social problems as city nursing. Problems of infant and maternal welfare in rural communities are many, and in every state in the union they are different, but in all my years of experience the one big problem remains practically the same everywhere—how can the rural nurse reach the people in sufficient numbers to make her work felt and accomplish results? It is true that some nurses are doing interesting pieces of rural nursing in isolated spots under most trying circumstances. Many nurses have a district composed of an entire county. Without a car for transportation the work is impracticable because expenses far exceed the amount of good a rural nurse can do who is dependent on a horse or trains for transportation. The rest rooms for farmers' wives in the small towns where health lectures and lessons are given, the work the nurses are doing out from the small rural schools and the isolated bits of infant and maternal welfare work in small towns, are all helping and are splendid, but they are scattered bits of heroic effort on the part of the nurses and those supporting their work. An average county needs to be divided into at least six to ten districts, each district with a graduate public health nurse and several attendants who can remain for a week or more in families, always under the supervision of the public health nurse. Such a service would undoubtedly be self-supporting in most rural communities if well managed, and would provide the much needed help for the ill mothers. It is widely recognized now that

the public health nurse is the indispensable agency in any organized health campaign and she is especially important in infant and maternal welfare work.

The county is the logical administrative unit of the state. It is also the logical unit in health activities. But if each county health officer was chosen and paid and worked in his own special way in each county with no reference or obligation to a state health department we would have no more chance of waging a winning health battle than would our soldiers in France if each regiment had picked his favorite spot to attack.

The existence or the development of a well and a broadly organized public health nursing section in *every* state health department is the first and the most important need in any movement for better care of our rural health conditions. The obligation of this department should be:

1. To stimulate local county demand for public health nursing service and to secure public funds for maintenance of work in counties.
2. To provide well-trained, competent nurses to meet the demand.
3. To co-ordinate and supervise the work of all the nurses throughout the state, much as is done with the county health officers now with a view to standardizing fundamentals and stimulating the tendency toward a higher type of public health nursing in rural sections.

I firmly believe that were each state provided with such a department and each of these departments provided with an extremely efficient, well-trained, widely experienced supervising nurse, within a few years most of the counties in all of our states would have efficient public health nursing services.

With all the wonderful pieces of organization work accomplished in the last year by the United States Public Health Service, the Council of National Defense, the Children's Bureau and our Red Cross Organization, it seems not too bold to hope that sometime one of these organizations will feel that better recognized and more *efficient State Departments* of public health nursing is its responsibility toward the health of the 54 per cent of the people of the United States who live in rural communities.

The foundation of all rural health nursing work, of course, must be education; following education will *come* the demand from the people

themselves for clinics and hospitals for mothers and babies. The demand will come with the greatest speed under the guidance of a socially trained public health nurse, not for charity clinics or free hospitals but for public institutions paid for by public funds because privately supported work in typically rural communities is not practical or possible for any length of time.

As an educator the public health nurse should receive the same attention to her fitness as the state pays to other educators, and not be left to her own resources in the remote counties where she is now struggling to teach health and prevent disease with little and often no encouragement by either the departments of health or education in many of our states.

In the few states now having a department of public health nursing which is usually limited to the division on tuberculosis or child welfare work, we find far greater numbers of counties with a rural nursing system.

The services of a state supervising nurse are varied; among them are:

1. To enlighten the communities about the value of the service, the duties of the nurse and methods of adequately financing the work.
2. To assist each nurse in adapting herself to the specific demands of the community.
3. To visit the nurses and give advice and training.
4. To conduct through correspondence a library department for encouragement and stimulation toward better work.
5. To arrange with universities and schools within the state courses for beginners and institutes for older workers in public health nursing.

For efficient oversight and sufficient knowledge of local peculiarities I believe that there must be at least one supervising nurse in each state and that her work must be officially recognized as a part of the state department of health, that each nurse doing public health nursing in the state be registered at the state department of health and that she be required to attend the meetings of all the state health officers. The same rulings which apply to all the small town and district health officers ought to apply to all public health nurses.

Only through state organization can we even hope to reach all counties and rural sections alike, and only through *general public*

health nursing can we ever reach the full number of women in any community needing *prenatal instruction* and only after educational work will the establishment of prenatal and infant welfare clinics be successful. The problem of reaching rural women with health knowledge has changed materially in the last two years. Before the war organization and co-operation among rural women was almost an unsurmountable obstacle to the struggling rural nurse; she had to depend on the clubs in her small villages entirely and as a result she was seldom able to reach the really rural mother who was always too busy and too tied down to go anywhere. Only a small per centage of the homes could be reached by the average nurse. But war has brought a marvelous change in the rural mothers; for war needs and the sake of sons and husbands "over there" they have dragged themselves out of the rut they had gotten into—a rut worn deep with everyday drudgery, and in communities where two years ago it would have rejoiced the heart of a rural nurse to get an audience of ten worn, tired, uninterested-looking mothers, she can now find groups organized by their own initiative of often fifty women—all knitting away on socks or sweaters, eagerly discussing the latest change in Red Cross directions or Council of Defense plans.

A few weeks ago I was invited to talk in a little country church where I had two years struggled in vain to get an audience of country women together for a health talk. I asked them what they wanted me to talk about and they all said, "Some things we ought to know about caring for the sick." So on the appointed day I went to the church; some of them had, at my suggestion, brought a cot and some sheets and simple sick room appliances found in almost any home. Imagine my surprise on finding the church so crowded with women that we had to finally move cot and audience out to the yard in front of the church so that everyone might see some of the simple lessons in home nursing.

A condition now exists in practically every country community that we rural workers have struggled to bring about almost in vain for years. The hard working rural women have banded themselves together in a work that seems so important to them that they even give up ironing on Tuesday if the Red Cross meets at the church on that day. Never has there been a more propitious moment to organize these aroused groups of women into health circles and carry to them

the knowledge of disease prevention and the need for prompt and better prenatal and obstetrical care.

The *door* to the *greatest* problem of rural nursing has been opened by the spirit of patriotism that has flashed up in the tired bodies and heroic minds of our rural women. We must not let that door close now that the war is over. The strongest wedge is what they are clamoring for, health instruction and simple lessons in care of the sick which can be so effectively given by the rural public health nurse.

The Chairman: We have all been much impressed with Miss Olmsted's appeal for more public health nurses and for a division of public health nursing in every state. This is the psychological moment. Every one of us who has done rural health work realizes that we have never had such favorable opportunities for furthering the work along this line for the care and protection of mothers and children. It is the greatest thing that has been accomplished in rural health work this year. Another thing that marks a distinct step forward is the fact that during the past year divisions of child hygiene have been established in four state boards of health, making altogether twelve divisions of child hygiene, in connection with as many state boards. This is the entering wedge, and if we can get four this year, we will get thirty-eight next year. It is a necessary thing. We have got to make some one responsible in every state for the health of the child, and the state board of health is the right agent to shoulder this responsibility.

RURAL WORK FOR INFANT WELFARE IN CANADA AND OTHER COUNTRIES

MAURICE MACDONALD SEYMOUR, M. D., D. P. H., Commissioner of Public Health for Saskatchewan

The great need for the saving of infant life has been fully realized by all nations and classes during the last four years of war, and work in connection with this subject has made a much more rapid advance in European countries than would have been possible in times of peace, as every one of the warring nations has been brought to see very clearly that its national existence depends on the strength and health of the new generation. Perhaps the advance in this respect has been most noticeable in Belgium where, in spite of very adverse conditions and suffering from lack of sufficient food, the infant death rate has been reduced very greatly by means of special arrangements for feeding mothers and children, visiting nurses, etc. A great deal of the reduction is no doubt due to the work of the "village nurses" who have visited the homes and given instruction in care of children, methods of feeding, etc.

In dealing with this problem of infant mortality in the cities and populous districts the matter is comparatively easy; there are large numbers of people within a definite area who can be reached through the health departments, which have their infant welfare divisions and nurses and the co-operation of the medical profession, but in the rural districts the matter is much more difficult and contrary to the general belief, health and good hygienic principles of living are not by any means the rule in the country.

In some parts of America, owing to climatic conditions, the most unhygienic houses and lack of ventilation are found in the country during the winter months; consequently respiratory diseases play a large part in the infant mortality rates.

Another difficulty in rural districts is the practising of untrained midwives, particularly in the large foreign settlements; although these women are not allowed by law to practise, very often nothing can be done to prevent it in the outlying districts, as there is no other assist-

ance at hand; in Canada midwives are not recognized, but there are so many of an undesirable type working in the rural districts that a careful system of licensing and inspection, similar to that adopted in Great Britain, might be a means of reducing the present evil.

RURAL HOSPITALS AND MEDICAL SERVICE

The question of adequately supplying rural districts with medical service is at present very acute, owing both to shortage of medical men and the fact that the doctors tend to drift into the large centres, where there is not so much hardship and inconvenience. In Saskatchewan, which is a prairie province and has a very scattered population, an attempt has been made to overcome this difficulty by legislation passed three years ago, allowing two or more rural municipalities to co-operate with any number of urban centres for the purpose of providing hospital accommodation for the residents of the district. There are over twenty of these hospitals now in operation in the province; the largest proportion of patients treated have been maternity cases, and there is already evidence of the tremendous benefit and saving of life of both infants and mothers in the outlying districts.

Provision has also been made by legislation whereby a municipality may make annual grant to a medical man, as an inducement to practise in the sparsely settled districts; this system has been found to be of great advantage in many instances, as the doctor is at least sure of a fair recompense for his time and work.

Legislation similar to that in Saskatchewan permitting a system of rural hospitals has lately been passed in the neighboring province of Alberta. This system of hospital accommodation provided by direct taxation on the people has been found to work out more satisfactorily than the old system of hospitals managed and controlled by corporations of private individuals. The farmer pays from \$3.50 to \$4.00 taxes for hospital purposes on one-quarter section of land, and for this he has free hospital accommodation and nursing for himself and his dependents; the hospital belongs to the people and is managed by the representatives, and the system is based on principles of co-operation for the benefit of all. These hospitals are assisted by the Provincial Governments, in Saskatchewan to the extent of 50 cents per patient per day, and in Alberta 25 cents per patient per day.

GOVERNMENT MATERNITY GRANT

In Saskatchewan financial aid to expectant mothers is given in needy cases; any expectant mother living in an outlying district, who foresees difficulty in obtaining medical aid at confinement, may make application for government aid through the registrar of her district, when the sum of \$25.00 is granted; \$10.00 are paid to the mother to procure the necessary articles and \$15.00 are paid to the medical man who attends the case.

The principal object in view is to secure proper medical attendance, and while the sum of \$15.00 does not pay the doctor, particularly if he has to drive a long distance, he is generally willing to take this certain fee and wait for the balance until the people are able to pay. This maternity aid is only granted in rural districts.

RURAL PUBLIC HEALTH NURSING

In Manitoba a regular system of rural public health nursing is being developed by the Provincial Board of Health. In 1916 five nurses were placed at headquarters in small towns, to do purely educational work in surrounding rural districts. Since then the work has been so successful that the number of nurses has been increased to twenty. The nurse's work centres round the school in her district, but her function is not that of a school nurse, the object of school work being to gain admittance to the home.

In the home a great deal of child welfare work is done and special attention is given to prenatal care. Tuberculosis visiting is also undertaken.

The nurses hold meetings for mothers at the rural school house, and give talks and demonstrations in general care of babies, infectious diseases, their prevention, etc.

The expense of the scheme is divided into three equal parts—one being borne by the municipality, one by the schools and one by the Provincial Board of Health.

A similar scheme of public health nursing in the rural districts is at present being adopted in the province of Alberta; the scheme is only now beginning with four nurses, but it is expected that the number will be greatly increased in the near future.

In connection with rural nursing, much good work has been done by the Victorian Order of Nurses; these nurses are doing both rural hospital and district work, but unfortunately the war has some-

what curtailed their activities owing to the shortage of nurses, which is very acute.

INFECTIOUS DISEASES

A great deal has been accomplished with regard to the preventing of the commoner infectious diseases, by educating the public to a realization of the high infant death rates from these causes. No matter how much legislation there may be, very little will be accomplished until mothers are made to realize that the prevention of these diseases depends almost entirely on them; and it is largely a question of constant education and reiteration of the fact that parents themselves are responsible for the large infant mortality.

Lectures are delivered at rural points as frequently as possible, and literature dealing with measles, whooping cough, diphtheria, etc., is distributed throughout the country to school teachers and parents; great importance is placed upon the preventive measures in dealing with measles, and the examination of the mouth for Koplik spots, and immediate isolation of suspected cases. In this direction the rural public health nurse is of inestimable value in making the people aware of the seriousness of these diseases, and how to prevent and care for them. Talks at the home and to school children and teachers are quickly bearing fruit with regard to preventive measures.

DIPHTHERIA

Diphtheria is largely a disease of early childhood; from 90 to 95 per cent of adults are immune; babies are rendered immune while nursing.

A great deal of diphtheria is spread by "carriers" and the following method of clearing carriers' throats has proved so satisfactory that its use should become general: The throat is gargled four times a day with a solution of 1:400 chlorozene, followed by spraying nose and throat with 2 per cent solution of Dichloramin T in oil. If the tonsils show evidence of disease they should be removed.

TOXIN—ANTITOXIN IMMUNITY

All infants under eighteen months should be actively immunized with three doses of toxin-antitoxin irrespective of the Schick test. All children over this age as well as adults should first have the Schick test applied and only those giving a positive reaction immunized with toxin-antitoxin. The toxin-antitoxin mixture should contain about 85

per cent of an L x dose of antitoxin ; three doses of 1 cc. each are given subcutaneously every seven days.

FREE ANTITOXIN

In the provinces of Ontario and Saskatchewan in Canada, diphtheria antitoxin is supplied free of charge. In Saskatchewan during the first year of free distribution the percentage of mortality from diphtheria was reduced from 16 to 9.2 per cent, a reduction of almost 50 per cent in the death rate.

From a financial point of view, the free distribution of antitoxin by the Government effected a saving to the people of the province of over \$50,000.00.

By the efficient and careful carrying out of the above measures diphtheria as a cause of death in early life could be practically abolished.

SPECIAL INVESTIGATION ON DEATHS OF CHILDREN UNDER ONE YEAR

In 1916 in Saskatchewan with a total population of seven hundred and fifteen thousand, and nineteen thousand two hundred and forty-three births, seventeen hundred and fifty-six deaths occurred under one year of age. A questionnaire sent to physicians and parents showed that of two hundred and eighty-five stillbirths, the majority were due to neglect and lack of sufficient prenatal care. Five hundred and twenty-nine infants died under one week, two hundred and seventeen under one month, and two hundred and twenty-seven from three to six months. After six months the death rate gradually declined.

Of the causes of death the greatest were congenital debility, 511 ; bronchitis and pneumonia, 183 ; diseases of digestive system, 165 ; all of which goes to show that the majority of these deaths were preventable. It was very noticeable that the artificially-fed children were in the great majority in these special reports and that a large number of them had been fed on patent foods of many varieties.

CHILD WELFARE CLINICS AND EXHIBITS

In connection with infant welfare work, practically the same methods have been adopted in all the provinces with regard to the rural districts. In most districts the work as yet has been of a general and propaganda nature in an endeavor to secure the co-operation of the public. Meetings in the country have been held, addressed by provincial medical health officers, and every endeavor has been

made to secure the co-operation of existing organizations, especially bodies of women. Motion pictures and lantern slides have been shown, and lectures on child welfare and the necessity for more work in this direction have been delivered. Baby clinics have been held at rural points, generally in connection with fairs, which have proved to be most successful. At these clinics the assistance of the local medical men is asked for and willingly given; children up to school age are given a thorough physical examination, and any defects requiring attention pointed out; mothers are advised in cases of faulty feeding, etc. Booklets and pamphlets on care of the baby are widely distributed, and educational exhibits dealing with proper methods of clothing and feeding, general hygiene, etc., are shown.

In many cases the work thus started by the health authorities has been continued by local organizations, and regular clinics have been established under the direction of local medical men.

In the province of Quebec pamphlets on infant care are handed to the family when a child is brought to a clergyman for baptism or registration.

There is already evidence that the publicity given to this subject is having effect; requests for literature and pamphlets are constantly being received and womens' organizations in the small towns and villages are making attempts to reach the rural population in their own immediate vicinity.

TOTAL DEATHS UNDER FIVE YEARS—1916

	All Causes	Measles	Whooping Cough	Pneumonia	Congenital Debility	Stillbirths	Diseases of Digestive System
Saskatchewan	2,283	83	90	108	523	285	241
Rate per 1,000 births	118.6	4.3	4.6	5.6	27.1	14.8	12.5
Ontario	9,352	315	323	809	3,104	2,698	1,537
Rate per 1,000 births	143.2	4.8	4.9	12.3	47.5	41.3	23.5

The above death rates for 1916 are given for Ontario and Saskatchewan, which may be taken as typical of Eastern and Western Canada.

It is seen that congenital debility and stillbirths are the cause of the greater number of infant deaths. This points to the fact that there is not enough prenatal care, especially when the large number of miscarriages and abortions, of which we have no authentic record—is taken

into account and there is no doubt that syphilis is the greatest factor in the production of this state of affairs.

VENEREAL DISEASES

Fournier, the great French syphilographer, gave the following statistics of syphilitic transmission: As a result of paternal transmission there is a morbidity of 37 per cent and a mortality of 28 per cent; maternal transmission results in 84 per cent morbidity and 60 per cent mortality.

In Ontario and Saskatchewan Wassermans are done free for those unable to pay and specific treatment is also furnished.

Venereal disease acts have been recently passed in Ontario and Saskatchewan, which compel patients to secure treatment. These acts are based upon the Western Australian Act which has been found to give good results. The campaign against these diseases is comparatively recent, and unfortunately the facilities for treatment in the country districts are as yet limited, but it is hoped that in the near future arrangements may be made for suitable and efficient treatment of all cases in the country; this will materially reduce the number of stillbirths and other great loss of infant life, by the making easily available of anti-syphilitic treatment during pregnancy when required.

Diseases of the digestive system are also responsible for great loss of child life, which can only be reduced by more education of mothers with regard to feeding; the feeding problem is particularly difficult in the foreign settlement, where it is not easy to introduce new methods in a short time.

Measles, whooping cough and pneumonia are the chief causes of death from infectious diseases, and here again the difficulty is the question of sufficient ventilation in the very severe winter months.

Bovine tuberculosis which is the cause of mortality in early life is caused by tuberculous milk, and will be prevented only when we become sufficiently advanced to have all milk pasteurized.

A NOTABLE EXAMPLE

In looking to other countries for aid in the problem of dealing with infant mortality in the rural districts, we have a notable example in the case of New Zealand, with the lowest infant death rate of any country. The laws affecting women and children are good, and baby

death rates in rural districts have shown a remarkable decrease. This work was started by Dr. Truby King, now engaged in important work of a similar nature in Great Britain—and continued by the Society for Health of Women and Children, founded in 1907. Since that time the infant death rate of New Zealand has steadily decreased.

Briefly outlined, the system includes: efficient training and registration of midwives, Government maternity hospitals, supervision of institutions having the care of children, and lastly, the important feature of district nurses called "Plunket nurses" who work as a rule in a district with a radius of about fifty miles. The nurse spends her time visiting various points in her district, doing general infant welfare work, including prenatal work, giving demonstrations, etc., and always emphasizing the value of breast feeding.

No country could do better than adopt the general principles of the New Zealand scheme, which has been proved to give such results.

In summing up the work undertaken in the different provinces of Canada, in the effort to reduce infant death rates in the rural districts, the following are the important methods employed:

1. The establishment of municipal hospitals subsidized by the Government at rural points.
2. The appointment of medical men at a salary by municipal councils, to serve the rural communities.
3. The conducting of child welfare clinics and exhibits, lectures, etc., at rural centres, more particularly in connection with fairs, when most publicity can be secured.
4. Wide distribution of literature dealing with care of the baby.
5. The adoption of a system of rural public health nursing which will be greatly increased in the near future.
6. Government maternity grant to expectant needy mothers in rural districts.
7. Education of the public and wide distribution of literature on the subject of infectious diseases, particularly with regard to the venereal diseases.

In order to improve the situation, the adoption of the following measures is to be strongly recommended:

1. A system of Dominion-wide training, registration and thorough supervision of midwives.

2. A general system of rural public health nursing, with particular reference to child welfare and prenatal care.
3. The providing of free treatment for all syphilitics by means of co-operation between Government and municipal authorities.
4. A more general provision for Government aid for maternity cases.

DISCUSSION

The Chairman: Several nurses from Canada are present; we shall be glad to hear from them as to what they are doing in Canada regarding the question of rural public health nursing.

Miss Elizabeth Russell, Winnipeg: I presume you want me to give you some information on public health nursing in the Province of Manitoba.

The work was started in April, 1916, five nurses comprised the staff for the first eight months and in 1917 it was increased to ten. At the present time we have a staff of nineteen nurses. We estimate that a staff of forty to fifty nurses could cover the province. Twelve nurses are stationed in rural municipalities and six in small towns.

It has been practically pioneer work up to the present time, but I can assure you that the good results have far exceeded our expectations. The city of Winnipeg has a staff of eight school nurses, but they are in no way under the jurisdiction of the Provincial Government.

Our nurses are assigned to a municipality having anywhere from twenty-five to forty small schools, or if stationed in a town we estimate they can care for 1,200 school children.

We have no medical men on the staff at present for school work, but the Board hopes, as the work develops, and more medical men are available, to have on the staff competent doctors and dentists who will follow up the nurses and attend to the defects of school children in these rural communities, where often the nearest doctor or dentist is twenty to forty miles away.

It may interest you to know just what our nurses do. The nurse attends school in the mornings and examines the children for defective eyesight and hearing—the symptoms of enlarged or diseased tonsils or adenoids—defective teeth, any contagious skin or eye disease, deformities or any other abnormal condition. The nurses do not make a diagnosis; children having any defect that needs attention are given a card to this effect, made out by the nurse, who also visits that home in the afternoon, urging the parents' to have their children given the necessary treatment. During my work in the schools I have frequently found children almost blind and sometimes entirely blind in one eye, but neither the teacher nor parents had thought it serious. It was generally put down to long or short sightedness. Children needing first aid are attended to by the nurse.

While in the home the nurse often finds conditions among children of pre-school age that she can advise the mother about. Often a sickly baby may

give evidence of being wrongly fed or an ailing relative is discovered that needs medical attention. In short, it is the nurse's work to make friends with the parents and help in any way she can.

The nurses also give short talks in each classroom on personal hygiene, simple rules of sanitation, care of the teeth and how to avoid taking and carrying infectious diseases.

We have had wonderful co-operation from most of the doctors in the municipalities, and the demand for public health nurses far exceeds the supply. We have no voluntary workers on the staff. The nurses are appointed and work under the direction of the Provincial Board of Health.

A standard has been set and each nurse has the same method regarding examination of children. The nurses give talks to mothers on prenatal and postnatal care of babies, infant feedings and infectious diseases. Little Mothers' Leagues are also conducted by the nurses.

It is a part of my work to visit each nurse in her district at least once a year. Nurses at any great distance report at headquarters about once every three months and they are otherwise controlled by written orders. As the work grows a travelling supervisor will be appointed.¹ Nurses stationed near Winnipeg report at headquarters weekly. The work is interesting and I sincerely trust that many nurses returning from overseas will take up this important branch of nursing. This year we have opened three child welfare stations in the Province. The influenza epidemic has greatly hindered our work in that direction. We have not yet attempted to touch the questions of supplying infants' feeding from the stations. The nurse attends at the station certain times during the week for clinics. I have been asked my opinion regarding the specialization of nurses. I do not consider it feasible to use them in our Western Provinces—at least in the present stages of public health work.

I have with me a synopsis of the work done in 1917 in Manitoba by nine nurses working ten months of the year.

Schools inspected	152
Children examined	12,179
Children re-examined	1,516
Children not vaccinated	4,510
Children with defective vision	1,521
Children with defective hearing	553
Children with suspected adenoids	1,662
Children with enlarged or diseased tonsils	2,984
Children with enlarged thyroid gland	880
Children with skin conditions	200
Class room talks given	126
Visits to homes	6,449

The Chairman: There are several points in this work that have interested me particularly for a number of years, one or two of which I will men-

¹ Appointed June, 1919.

tion now. I hope that public health nursing, as it develops, will help to throw light on some of these points. One of them is the question as to whether there is a higher or a lower death rate at birth in the rural districts than in the cities. Another is, what is the mortality during the first month of life, stillbirths included? We made a survey in fifteen counties which distinctly showed a higher death rate in the rural sections of the state at birth and in the first month of life than in cities. This is contrary to the statistics of the Bureau of the Census, and that is a point which further work may clear up. I believe the death rate at birth is largely due to the lack of prenatal care and lack of domestic help and the women are compelled to get up and go to work immediately after confinement, hence the death rate at birth must be higher in rural districts, and also the death rate during the first month of life in the rural districts.

Another point is the nutrition of the country child. We have had several reports on the subject from the state chairmen of the State Councils of Defense, but I do not know whether they can be corroborated with reference to the nutrition of school children and children of pre-school age, and particularly with reference to the children reached in the weighing and measuring campaign. It was stated that the percentage of malnutrition found in children of pre-school age in one state—country children—was 16 per cent; and in the city school children, who were weighed and measured, it was 7 per cent. This is a marked difference. Dr. Wood's statistics of school children made before the war, six or eight years ago, show an increase, but it is suggested that there might be a decrease in the nutritional condition of rural school children on account of war conditions, and the country children may show up worse after the war than before the war.

Dr. Woods Hutchinson, New York City: This is an important subject, particularly on account of the splendid work the doctors and nurses have been doing on the other side of the Atlantic. We have kept up such a splendid standard of health along the Western Fronts that the next thing is to civilize the country districts at home and bring them up to the same standards. The old idea that the country was a particularly health place to live in is a good deal of an ancient misconception, but it will be a long time before people will cease to believe it. Some one has cynically said that people do not live any longer in the country than in the city, but it seems longer. The actual child mortality from disease is high, and all states of malnutrition which we find in city children you can find in the smallest country districts. It is just the same way as regards vice in the great cities, about which we are so terribly concerned. It is concentrated and strikes the eye hard, but the country is almost as unhealthy and quite as immoral, though so scattered it often escapes us, and now we should be ready to do missionary work for it.

The statements made with reference to the nutrition of the country child are true. I began country practice in the west. The children were habitually underfed in quality and variety of food. The diet consisted largely of potatoes, cabbage, bread and butter, molasses, salt pork and salt beef. This was about the limit of it, and the milk was usually skimmed before it was given to the child.

Food is a matter of dollars and cents to the farmer, and up to a few years ago the farmer thought he could only prosper by doing all his own work and living upon what he couldn't sell, so that the children suffered in the rural districts, and I believe every investigation shows that the malnutrition and physical defectiveness of the country school child is greater than that of the city child. There are two things that will be helpful in the cleaning up of the country, and one is establishing a good central school to which the children of every county can be taken and receive the proper attention and luncheon. The little red school house was of value, but was in session on an average only about four or five months in the year, and the children grew up well and strong out of doors, in spite of its poor sanitary conditions. The difference between the average country school house and the city school house is enormous. There should be central schools in the country where they can have clinics, where there are nurses to wait upon and attend the children, and where they can find out and treat properly those numerous defects that are so common among country children. Adenoids, enlarged tonsils, nutritional disturbances, and so on, can be got at and reached in that way.

The other element is a country hospital. So many states have now county bonds with which to pay for a county hospital. When that is done it is virtually a health club for the entire community. It is a place where the people with disease can be brought, where nursing can be provided, and that will become the health center of the country.

A third element is an intelligent and rational system of medical practice which we have not got. In the country districts 50 per cent of the people get inadequate medical attendance; only 30 per cent get adequate medical attendance, and the reason for that is we have no state scheme. When the boys come back from the trenches victorious they will bring with them a sound conviction of the value of state medicine, and better communal improvements for the health of the individual.

I have recently come back from a year of it in France and elsewhere, and it is the finest thing in the world from a health standpoint since the Panama Canal. We have a death rate from all causes on the Western Front in that mud and slush and snow of barely 2 per cent per annum among our American and English troops and a 3 per 1000 per annum death rate from disease on the English and American and Italian fronts when I was there as contrasted with 12 per 1000 in the ordinary cities at home. In the fighting areas the boys received splendid food and the best of protection from disease. Typhoid fever was wiped out by vaccination, and diarrhea and dysentery by the splendid system of water supply. As to the system of sanitation and care of the wounded in the British Army, if there is any better system on this side of Jordan I would like to know what it is. In point of sanitation the English come first, the Italians second, the Americans third and the French fourth. At least such would be my rating. The death rate in the war from disease was very, very low. The death rate on the Western Front was about one death from disease to five deaths in battle. War has been made less deadly than ever before, and the total effect on the boys was remarkable. They held

their shoulders back and their heads up and were ready for anything that came. I believe they could go on fighting for ten years or longer. Such was the spirit of our boys. The skill of our doctors and the attention given our boys by the nurses is what kept our men fighting on the Western Front and which enabled them to clean up the enemy. The boys know what it is to be kept in perfect health and properly fed, and they are going to see that that sort of thing is carried out when they come back home. They are going to see that they have similar conditions at home to what they had over there. These boys will come back with a new sense of justice and fairness, from the democracy of mutual helpfulness they lived in over there. They faced death and have made terrible sacrifices.

I have an opportunity to speak rather frequently before chambers of commerce and other organizations, and they talk much of what they are going to do for the boys when they come back. I tell them they need not worry about what they are going to do for the boys when they come back, but they should stay awake at night over what the boys are going to do to them!

Miss Mary Power, Bureau of Child Welfare, Provincial Board of Health, Ontario: I wish to report briefly on the work we have done during the past year. Our activities in the main have been confined to the stimulating of local interest in child welfare work. This has been done by correspondence and by the sending of our Child Welfare Exhibit throughout the Province, visiting the larger centres. The exhibit during 1918 was not taken into the strictly rural communities but invitations were extended to the local Women's Institute which is an organization of our rural women, and in this way the people from the country districts have seen the exhibit. Our plan in general is to interest the local medical society who are requested to elect from among themselves medical attendants for the baby conferences. The training schools in connection with the hospitals have also been quite ready to supply assistants for the nurse and we have found that the new field thus opened up to the undergraduate nurse has made a strong appeal to her and we trust will be productive of much good in the matter of securing recruits for future public health nursing work. The women's organizations usually undertake to advertise the exhibit and make themselves responsible for the attendance of the mothers and children. The procedure at the clinic is as follows:

Each child is weighed and measured, preferably without its clothes, and the four measurements, height, head, chest and abdomen taken. The information is secured from the mother in regard to the feeding during the first year. With this information upon the card, the doctor then proceeds to make a complete physical examination.

As we all admit, it is rather difficult to sum up the total results of this work, but we have been able to claim, at least, some credit in the organization of several child welfare centres throughout the Province this year. (1) In the City of London (50,000) a child welfare week was held in February, which was followed by the formation of a Child Welfare Association which combined all the existing agencies interested in the child. A nurse was secured and clinics were started some months later. (2) In the City of Brantford sub-

sequent to our exhibit a series of baby clinics was inaugurated, the plan here being based upon co-operation between the Social Service Guild and the hospital. (3) In the Town of Port Hope (4,500) where the local medical men each devote one half day per week in turn without remuneration, and the hospital supplies the space and the nursing help, child welfare clinics were established in May last, two weeks after our exhibit had been shown there. (4) In the Town of Espanola (2,000) which is a "Company" town in Northern Ontario, clinics were held every second week from June until October, when the epidemic interfered. In this small centre registrations at the clinic reached the two hundred mark.

The exhibit was also shown in the Town of Brampton in connection with the display by the agricultural representatives and in the fall at the Canadian National Exhibition, which as you know lasts for two weeks. The attendance in 1918 almost reached one million. Through the co-operation of the Division of Child Hygiene, Department of Public Health, City of Toronto, who very kindly supplied the attendants for the baby clinic, the school age clinic and the dental clinic, we were able to do a great deal of instructive work, practically one thousand children passing through the hands of the clinicians. From Toronto the exhibit was sent to the Central Canadian Exhibition at Ottawa, after which several county fairs were visited during the early part of October, when the epidemic of influenza broke out.

Dr. Charles J. Hastings, Toronto, Ontario: I would not have spoken this afternoon were it not for the fact that I do not like to let the opportunity pass of thanking Miss Olmsted and expressing my high appreciation of her presentation of the subject.

We must democratize the knowledge we possess; we must present it in such form that it will be of interest to the man on the street and the woman in the humblest home. Through our public health nurses we have the means of educating those people who have receptive minds and with whom we come closely in contact.

Some one has asked—I think it was Dr. Woods Hutchinson—what are we going to do for the men when they come back from the front. It is not a matter of what we are going to try to do for these men, but rather what these men will do with us. When these men come home they will demand the kind of democracy that means justice to all, and we cannot consider we are administering justice to all until we are giving every one a fair chance.

Dr. Hutchinson spoke rather disparagingly of the country. To my mind there is no better place on God's earth to bring up children or to raise a family than in the country. What we want is what is presented here on the front page of your program, namely, "Give me intelligent motherhood and good prenatal conditions, and I have no doubt of the future of this or any other nation." If we can democratize the knowledge that we possess in regard to the proper care of the child, in regard to prenatal care of the mother, and give the same amount of knowledge to the people living in country districts, together with an unlimited supply of God's fresh air and sunshine, and with milk that does not pass through a dozen hands from the cow's udder to the baby's mouth, it

will mean a great deal. I feel the great future of practical public health administration is going to be placed in the hands of the public health nurses, and I hope no stone will be left unturned to increase the supply of such nurses. I am glad to see that the western part of the country is going to establish, if they have not done so already, a post-graduate school for nurses along the line of public health nursing. This is gratifying, and I hope similar action will be taken all over the continent because there is no greater need now than for public health nurses and no more valuable medium through which we will get efficient public health administration than through the public health nurse who visits the home, who wins the confidence of the women in these homes, and who can talk to them, and whose assistance will be accepted and advice acted upon in a way that is not possible through any other channel.

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**ROUND TABLE CONFERENCE IN CO-OPERATION WITH THE NATIONAL
STUDY OF METHODS OF AMERICANIZATION**

(Division of Health Standards and Care.)

Health Problems of Foreign Born Women and Children

Chairman, Mrs. William Lowell Putnam, Boston.

The Chairman: We have met to consider the question of the health of women and children in connection with the study of Americanization. There is nothing more important before the country than Americanization. This country has been drawn together into a union, such as we have never known before, through the great war. It has been the greatest unifying influence we could possibly have had. But if we stop our efforts for national unity now, we shall disintegrate into our component parts, for the centrifugal force is very strong because we are composed of so many parts. One of the most important jobs we can undertake is to keep the country united as it is now and to make it more so. I do not like the term Americanization, but it is the best we have, and as this is Mr. Davis' meeting, I will ask Mr. Davis to open the discussion.

Mr. Michael M. Davis, Jr., Boston, Chief of the Division: I suppose the first question that comes to one's mind in relation to this subject is whether there is really any health problem in Americanization. Obviously, if an immigrant has been here for several years and does not speak English, there is an educational and civic problem because he lacks our common medium of language. But is there a *health* problem in Americanization? Is health not a physiological matter substantially alike for all members of the human species? There is, however, a real question whether all nationalities are the same in the diseases to which they are most subject; whether there are not racial peculiarities with respect to various diseases. Do we or do we not find certain diseases more prevalent in proportion to numbers among women and babies of certain nationalities than among other nationalities? This is a subject on which there is not much definite information and which is worthy of further study.

But aside from this point is there a problem worth studying, to determine whether the Americanization program in this country needs to consider the health problems of women and children? I suppose that we all realize, as Mrs. Putnam has just suggested, that Americanization is a word that cuts both ways. Americanization means to my mind giving something to the American native born as well as to the foreign born in this country. I think that it means or ought to mean approximation, a closer bringing-together of groups, one native, the other of various varieties of foreign born.

In relation to health, are there differences in health standards between the native born and the foreign born? Does the foreign born woman, to come down to our specific subject, have a different standard of caring for her baby and a different method in caring for herself during pregnancy and confinement than the native born? Is there a difference in health standards? I am sure that in certain localities the actual standard set by the practice of

the community differs widely from the standard outlined this afternoon concerning the care of an infant in a well-to-do private family. As a matter of fact actual standards of caring for mother and baby are different among the foreign born and native born. Is this difference due simply to the fact that the average native born are financially better off than the average foreign born? If you give a thousand foreign born families an income of five thousand dollars a year, would you at once or very quickly have practically the same standards of care for mother and baby as we find among native born with equivalent income? That is a question which gets to the root of the subject, and what I am saying may suggest questions to you.

Personally, it does not seem to me the difference is wholly economic. I have seen native born families with very low income who differ decidedly from the usual foreign born family in their mode of care of mother and baby. There are customs, habits and methods sometimes carried for generations, concerning the care of the little baby and pregnancy and confinement. The use of swaddling clothes or of midwives has psychological as well as economic roots. We do find noticeable differences between various foreign born groups and between the foreign born and the native born. We also find that the attitude of the native born towards the foreign born is one of the chief determining effects of the situation.

I was in a community recently in which from sixty to seventy per cent of the children were foreign born, there being only a small nucleus of native sons and daughters. These were comparatively well off and they rarely had any conception of the conditions which prevailed among the majority of the families of the community. The attitude of these native sons and daughters was not wholly of indifference to the foreigner. They were ready to give charity in case of need, or to help in other ways. But they had no idea of a common life which native and foreign might and should build together. Between the two groups was a great gulf fixed—in their minds. The attitude of these Americans, so-called, towards the foreigners of that community was the most difficult element in the whole situation.

A problem which has appealed to me strongly is the isolation of the foreign born mother. She is cut off from the community by the barrier of language; she gets out of the home very little, far less than the husband; she is burdened with the care of the husband and children and kept within a very narrow circle of duties most of the time. This isolation of the foreign born mother carries with it problems we must wrestle with. What methods shall we adopt in attacking them? Do we need to use special methods in infant welfare work or prenatal work in dealing with the mother or baby? Are there examples of effective special methods for reaching the Italians, the Poles, the Bohemians and so on? Do we find some nationalities more difficult to deal with than others? It is said that Poles are most difficult to get hold of or to deal with. Is it true? If so, how far is the difficulty due to our lack of understanding the people we want to help? How far is it necessary for those who are doing work as organizers, doctors, nurses, or social workers among mothers and children in foreign born sections to acquire knowledge of the customs, points of view and background of the people we

are working with. How far is that necessary, and if it is necessary, how shall it be done?

There is in process a national study of Americanization, designed to bring out from all parts of the country these special problems of the foreign born, their attitudes, habits, traditions and points of view; their attitude toward the conditions under which Americans let them live here; also the problem of education of the foreign born in English and in citizenship; the industrial and the political problems. These and other matters are now the subject of national study with the aim of helping the country to formulate some program. The health problems are one division of this broad subject with which I happen to be connected. I am especially interested in health as concerns the foreign born women and children. It is to be hoped that discussion by this group of specialists may throw some light upon the questions that I have been raising. I hope the next hour will bring forth not only more questions, but many answers.

The Chairman: I am hoping that Dr. Hedger will answer some of the questions Mr. Davis has asked.

Dr. Caroline Hedger, Chicago: I have been very much interested in the last three months in the question of how far it is possible to train women who have not been specially trained in social work or in infant welfare in the fundamentals of standards of child health, the details of breast feeding, and some simple baby hygiene in order to use them among the foreign people who need help with their children. Can we, for instance, use these women effectively enough so that we can prevent some of our too prevalent summer diarrheas; to use these women so that we can get some better standards of feeding and cut off deleterious substances fed to babies by foreign mothers. I have always believed this work was to be done by nurses, and I have always hoped for social education of the nurses which would make this education of mothers wider.

I would like to know what the experts think about the possibility of training ordinary women, the kind of women that take home nursing courses under the Red Cross, the kind of women who by the war have been jolted out of their social activities, and what can be done in the training of those women to assist in the problem of breast feeding and ordinary care of children in foreign neighborhoods? That question I should like to hear discussed. I am not ready to discuss it myself.

The Chairman: I should like to ask Dr. Hedger a question. Do you not think the women of whom you speak, especially the young ones who are as yet perhaps unmarried, might be trained with a small amount of training to be of great help in this work, and if so, would it not be of immense help to them later?

Dr. Hedger: I can answer that question only in part. I can say this: I believe there are women who are keen to take that kind of training. How effective they will be after that training is given them I do not know. We have a very fine class of thirty down in the Tower Building in connection with a teaching center of the Red Cross. The Red Cross gives demonstrations in food supplies and the preparation of food, and Mrs. Wood provides

technical standards for child health and demonstrates the technic of breast feeding, etc., and the class is immensely interested in the work. How valuable these women are going to be that we get from this class I do not know.

The Chairman: Are you familiar with the work in England, for instance, Oxford?

Dr. Hedger: I know of it only in part.

The Chairman: This work is done in England by women of the better class for the lower class.

Dr. Hedger: Such work I believe has been going on for some years, and it was shown in the Hygienic Exposition at Dresden.

The Chairman: It is not new, but I think it is effective.

Dr. Hedger: That I do not know, as I have never seen an adequate report, and I do not know how effective it is. But their conditions are different from ours. They have a single language, they have practically a unit so far as language goes. There is not the bar of racial difference; there is not the bar of superstition; they have the same superstitions more or less, and there are so many differences between our problems and theirs that I have never felt their results counted much for us.

The Chairman: Another thing: Do you think it would be possible to take the more intelligent people of the different nationalities who have prejudices and superstitions behind them and train them perhaps to help their own people under the supervision of a trained nurse?

Dr. Hedger: I have had bad luck with that, to tell you the truth. Some years ago I thought I was doing a very smart thing when I got from Miss MacDowell a finely trained foreign speaking nurse. She had grown up in the neighborhood of the big stockyards; she had fought her way from severe poverty into a fine training school in this city, and I thought I was drawing a prize. I felt quite inflated with my fine idea. She did not work at all. She looked at her less fortunate and less educated countrymen, and you could see the corner of her nose curl when she looked at them and said with every muscle in her face moving, "Well, if you worked where I have worked and in the way I have worked, you would be where I am, and you would not have to be helped as you are now." She did not work out at all well.

The Chairman: That I can readily see, but suppose you take an educated person who started out right, how would that be?

Dr. Hedger: I have never had that chance, and still I have my doubts about it. Maybe I am entirely too pessimistic. Nevertheless, I should like to see it tried as an experiment.

The Chairman: We should like to hear from Miss Besom on this subject.

Miss Pansy V. Besom, Boston: This is a very big and important subject. As I listened to Mr. Davis the thing that came to my mind was why not start a campaign to reach the better educated foreign women and persuade them to take the nurse's training, then send them into the homes. I do not mean a superficial training, but give them the average three years' course in a hospital training school. I recall one Italian nurse who is doing very

good work. I have heard the other story, too, that these nurses are supercilious and impatient with their own people; that they do not care to go into the homes and that they are not acceptable when they do go in. But this nurse is doing splendid work among the Italian people. She is reaching them and helping them in many ways. Let such a woman take the necessary training and teach her own people and she ought to be able to reach and teach them better than any one else. I do not know much about the better educated foreign women of other nationalities. I do feel that if the well educated Italian or Polish or Russian woman should take the training and, thus equipped, teach her own people, she ought to be able to accomplish a great deal in the way of educating them.

Dr. Hedger: What inducement would you offer a well educated foreign woman in the way of remuneration to take this nurse's training and go out among her own people and teach them?

Miss Besom: She should be anxious to do it for the sake of her own people. We can surely find enough women of this sort to do it.

The Chairman: That is a pretty high plane from which to view this situation. There are many people like Miss Besom and many of them who reach that plane, but there are a vast number more who never attain it, and yet who may do exceedingly good work if helped.

Miss Besom: We want to set a high standard. The foreigners are crowded in their home surroundings and living conditions. Mr. Davis spoke about the condition of foreign mothers and asked the question whether foreign mothers desired as high a standard for the health of their children as American mothers. I think absolutely they do. I think they want the high standard; that all foreign mothers want their children to keep well. One of the great things we have to contend with is their going from one doctor to another in their desire to have the child improve quickly. These mothers very often feed their children the sort of food that makes them sick because they do not understand dieting, but whenever a child gets sick they call a doctor at once. They want their children to be well and strong the same as our American mothers do.

The Chairman: Don't you think all nationalities are about alike in that regard?

Miss Besom: Every mother wants her baby to keep well, even though she does not know how to manage it.

The Chairman: From what you have said, I take it we should offer the beginners remuneration sufficient to get a large number of educated women of different nationalities to take the three year course in nursing. Why the three year course?

Miss Besom: When nurses have taken a three years' course and have graduated they expect a certain remuneration.

The Chairman: Is it necessary for them to take three years' training for the work which they are expected to do?

Dr. Hedger: To a large extent you can train all these women in far less than three years.

Miss Besom: That may be true, but in our national organizations the three year standard has been set.

Dr. Hedger: You are not getting them trained in the health teaching we need. From the records of the hospitals in different cities they have fine social service departments where people learn this field work, but in the great mass of hospitals in this country with the third year course in training, when they turn the nurses out they need extra training for that particular health teaching of which we are speaking.

Miss Besom: Let the hospitals give public health training during these three years.

Dr. Hedger: There are only a few hospitals that do that. The woman would have to have three years' hospital training and four months for her philanthropic work at least, making her a good field worker unless she is a graduate of a selected school. You do not think a lay woman can be trained to teach breast feeding?

Miss Besom: Yes, but there are many things besides breast feeding which go to make up good child welfare work.

Dr. Hedger: That is true, but that is fundamental after all.

Miss Besom: It is a big thing to be worked out. We will have to try it both ways. Our American nurses are coming back from the front and they will go into the field. Now the war is over we have more and more nurses who formerly were doing private nursing who will come back and take up public health nursing.

The Chairman: Is that the only way you can teach the foreign people?

Miss Besom: We hope to reach the foreign population through social workers as well as public health nurses. They are well trained persons.

The Chairman: Such a person would require special training, would she not?

Miss Besom: She does not think so.

The Chairman: The trained nurse and the social worker is the only way you can reach them, in your opinion?

Miss Besom: That is the principal way, but we must also reach them through clinics. One great difficulty we have is to educate the foreign people to attend clinics. In the rural communities it is a big problem and much education is needed.

Mrs. E. C. Witherby, Syracuse, New York: The New York State Department of Health, owing to a shortage of nurses, is just trying an experiment which I thought would be interesting to mention in this connection; namely, to train a group of public health nurses' assistants. This group is to have nine months of intensive training to prepare them to do any sort of public health work which may be delegated to those who have not had a full nurse's training. It is thought that some portions of the routine work can profitably be left to persons who have had training along certain definite lines. This training is to be given at Syracuse University under the direction of Dr. F. W. Sears, State Sanitary Supervisor for that part of the state, and is divided into three periods of three months each. As the course was originally planned, in the first period the students have "book learning;"

the second period is spent entirely in hospitals, so that they will get hospital procedure and routine. The third period is spent in field work, in welfare agencies of various kinds, in dispensaries and so on. This plan is subject to change if advisable. The idea is to give enough knowledge and experience so that the students can be employed *under the direction* of a thoroughly qualified public health nurse, to extend her services, and the first course has just started with twelve pupils enrolled. At the end of three months they will take twelve or fifteen more pupils, so that there will always be a group doing active hospital and dispensary work who can be counted upon as assistants in this work.

The Chairman: In the short period, are they expected to do active field work?

Mrs. Witherby: Yes, under supervision, and in the first period they get an outline of the theory of public health work in general.

The Chairman: How long has it been running?

Mrs. Witherby: It has just started. It was opened on the second day of December, and if it is a success they plan to establish, I understand, four centers, one in New York City, one at Albany, one at Syracuse and one at Buffalo. These four centers would be running at the same time.

A Member: What type of work are they expected to do in the home?

Mrs. Witherby: They are not doing any work in the home. They are preparing to do public health work. They can be assistants to the nurses in clinics. For instance, they can be sent out to interest mothers to bring their babies to clinics so that the nurses themselves do not have to spend their time doing this. They are given instructions in certain definite things, such as baby feedings, or are instructed in breast feeding, as suggested, and simple rules of diet can be taught by these girls. In short, they are expected to relieve the trained public health nurse of any work that can safely be assigned to a partially trained assistant.

The Chairman: What class of girls come?

Mrs. Witherby: They have to be high school, normal school or college graduates.

Miss Frances Perkins, New York: While Mr. Davis was speaking I was turning over in my mind a number of questions particularly with reference to my own organization, and I have definitely come to the opinion that there are certain problems in health work among the foreign born, which are peculiar to the foreign born and which put them in a different classification from our native born. All problems are intensified when poverty is present as a complicating factor, whether we deal with the foreign born or the native born population. But in our particular work—the Maternity Center Association in New York—where we are dealing with one of the most important phases of the health of the foreign born group, we find that prejudices, superstitions and traditions have a very strong hold on the life of the people. The survival of totems and forbidden things has been more strongly identified with sex than with any other phase of life, and it is natural that

these superstitions should retain their hold on peoples who have not lost their primitive characteristics.

In going over the field with nurses and in asking them questions in regard to the superstitions and prejudices which they meet and which tend to prevent them from doing effective work, we have found that the prejudices differ with every nationality; but that through them all runs a common thread which has for its object some sort of external protection against a great evil which they do not understand and which they fear. The survival of such superstitions in regard to labor in childbirth, and to the care of the young children, has a horror and terror for primitive women who cannot understand the scientific explanation of their condition. Those who have paid attention to superstitions of this character realize that the horror of them has only been little mitigated for us in our generation, but we have translated them into somewhat different terms. So in order that we may reach our people more effectively, we have tried to work out the translation of some of these terrors and superstitions, in modern terms, and I feel that in making this attempt we have simply been doing what the Christian missionary used to do. The Christian missionaries used to take the old Pagan festivals and rites and translate them into Christian terms and utilize the old Pagan myths for propaganda—to express a new spiritual idea. In the same way, it seems to me, if we endeavor to find the basic ground for these superstitions, we can frequently translate them (rationalize is the word I have used to the nurses) and make them interpret some custom which is related to the old superstition. We have had considerable success in the last two months in applying this idea in our relations with some of the peoples with whom we have been brought in contact in the work of the Maternity Center Association. For instance, there is an old Pagan tradition, which is common with nearly all primitive people, that a woman is unclean throughout the period of her gestation and that she must undergo special purification after childbirth. The Christian missionaries took advantage of this belief which had such a strong hold on the minds of Pagan people and gave the rite a spiritual interpretation by insisting upon the Churching of Women after childbirth. In time this became merely a thanksgiving after childbirth. Among the foreign born we have on our list in New York, both among the Orthodox Jewish people and among the Christian people, Russian Christians, Russian Orthodox, Greek Catholics and Roman Catholics, we find that the custom of churching is fixed. They all observe it except those who have departed so far from religion that they have forgotten the old traditions. It is, of course, a well known fact that many primitive customs have a definite basis in hygiene. The period in which women must be churching is four or six weeks after delivery, and we have utilized that custom to bring the women back to the clinic for examination, impressing upon their minds the fact that they must return to the clinic immediately after they have been churching.

There is one superstition which we find chiefly among the Oriental peoples, the Assyrians, the Greeks, the Roumanians, in the lower part of Manhattan, that is a prejudice against having their babies weighed. The fact that the baby is naked is supposed to subject it to the influence of the

evil eye. A little familiarity with Oriental mythology and of the belief in charms which will turn away the evil eye, gave us the key to this prejudice. We found some cheap crosses with Arabic letters on them, and bought them and presented one to each newborn baby; the crosses cost ten cents apiece and through their use we were able to overcome the difficulty of having the baby weighed.

Another interesting custom which we have observed obstetricians say is not so bad if used with discretion. The women have a theory apparently that every pregnant woman should scrub floors, and I am told that women of wealth and education, among the Polish people by whom it is held, put their daughters to scrubbing floors as soon as they become pregnant. This is interesting, because floor scrubbing is after all a useful variation of the knee-chest position which has been taught to so many women under the care of obstetricians. Doctors on our medical board have said it is not so bad for these women to scrub floors, provided they do so in moderation. But we persuade them not to take positions as office cleaners as soon as they are pregnant, but confine the floor scrubbing to their own homes. In this instance, as in the others I have mentioned, we have tried to take advantage of a few of the traditions and superstitions we have encountered to make them count for something in our scheme of the modern scientific improvement, but we have not by any means gotten to the bottom of all of the superstitions.

As to some of the other aspects of the work among the foreign born we have had rather good luck in some ways in utilizing the services of well-to-do people of these nationalities. We have found the Polish people the most difficult group to handle. I cannot help feeling that their terror is psychological and is based on the experiences of their race, for the Poles have lived in subjection for many years; they have lived in terror of rape and of the kidnapping of their children, all of which has had a basis in fact. I do not think it strange they are terrified by everybody who comes to their door, particularly if they take an interest in their children or in the physical condition of their women. The men fly into a panic if a male physician begins to touch or do anything for the women. We have almost given up delivering women in the Polish district, through the out-patient lying-in department, and we are getting together a group of women physicians who are co-operating with us for the sake of overcoming the prejudices which Polish women have. Some of our nurses have frightful times in dealing with these Polish women.

The Chairman: Is that universal?

Miss Perkins: I am thinking of one or two districts. I do not say it is general because these two particular groups are the lowest class economically. Furthermore, they have no educational advantages, but we have had help from the more intelligent women of these nationalities. There are twenty or thirty women who have taken the Red Cross training course and who are prepared to render this kind of service to their countrywomen. We have appealed to them and have gotten some help from them.

We got one person from them who acted as an interpreter, but we found that an interpreter did not answer the purpose altogether. What was needed was some one who could allay the superstitions and fears of these people.

We have done the same thing among the Bohemians. In New York we have had a council of editors of foreign language papers which met regularly for a year or more. I presented our plan of establishing maternity centers all over the city to them, and they gave us a good deal of co-operation, and wherever such a center has been opened in a foreign-speaking neighborhood I have been able, through the editors of the papers read by the people of that vicinity, to get a good deal of publicity of the right kind, so that people could learn about the progress of the work, and perhaps the best response we have had has been from the foreign people.

As to the method of instructing the women in regard to the care of their health during the prenatal period and during maternity, we must have nurses both as interpreters and instructors. I do not believe it is wise to have this instruction transmitted through a child of ten or twelve years of age.

In this connection I think some scheme of interpreters ought to be worked out for the help of social workers and nurses with foreign born people.

We have also built up a number of advisory committees in our more difficult zones, and by means of these advisory committees of people of the same nationality we are able to secure a great deal of assistance. They have also been of great service as relief committees.

The dietary customs of the different nationalities constitute another problem which we have to face, because foreign born women need instruction in regard to diet and dietetics, and this instruction should be given in such a way that they will understand its significance. We have gotten nurses to make inquiries and to check up their inquiries by comparison with actual practice and to make a food table based upon dietaries in common use among the various nationalities. We have also made out a diet list for pregnant women of each nationality based on what they actually have on their tables. It works very well. It needs standardizing, as it is quite simple. It is too much to ask the ordinary nurse to do that herself every time she runs into a different nationality. A woman should be told the kind of food she is to take when she is pregnant, and whether the food she takes is proper or is not good for her. When we are dealing with Jewish women we must of necessity take the Jewish regulations in regard to food into account. We have made out a dietary for them which is well balanced and suitable for pregnant women, and yet it conforms to the Jewish dietary rules. We might even standardize it.

I have a feeling that the worst barrier between us and foreign born women in this maternity work is the fact that in so many of the foreign born the slave status of women has not been abolished, and there is a tremendous difficulty for the average public health nurse to overcome. The woman considers herself and is considered the property of her husband and

she is to obey him, and whether or not she comes to the clinic it is for him to say and not for her.

The Chairman: Could not that be reached by a process of education of the father?

Miss Perkins: Yes, I think it might be. I believe in time husbands will consent to it. We have directed our efforts toward the women in this respect, and we must remember that the foreign born man is perhaps less informed on the subject of what good health standards in America are than the women, and yet the men have a right to say no.

The Chairman: We must educate the father.

Miss Perkins: You are probably right about that.

The Chairman: The remarks of Miss Perkins have been very illuminating. I am sure that the use of the traditions of a people is the only way to reach them. I wonder very much if we are doing all we can to make use of their traditions and their customs as contributions on their part to Americanization. There is nothing in the world that people care for so much as that to which they give something, and the more they can give the more they care. It seems to me that is one of the very important things towards Americanization which we do not dwell on half enough.

I want very much to hear from Miss Foley.

Miss Edna Foley, Chicago: After the remarks by Mr. Davis and Miss Perkins, there is very little left for me to say, and yet there are two or three points that I would like to touch on briefly. In the first place, Americans, whether of the first or tenth generation, are too provincial. Because we were born and raised in Chicago or New York or South Bend or Erie, we must not think that as a class we are better than the foreign born. We must not think that all non-English speaking people crossing the Atlantic are inferior. As strangers they must go to the foreign section because from the moment they strike Ellis Island they are surrounded by such a wall of isolation, prejudice and extortion that when they finally drop into the arms of relatives or friends of one of our foreign quarters they never move from that particular spot unless they find another job in another town.

Americans as a class do not accumulate much wealth, but we live comfortably and selfishly. We take the money of these people; we use their labor; we let them breathe and let them feed themselves as they please; but we rarely open our doors to them. We do not take them into our families and they do not understand how Americans live. Not one in a hundred ever gets the chance to see a normal American home except by way of the laundry or basement or kitchen, consequently, when these people do see an American home they see nothing attractive in it, nothing for them to imitate. They may, perhaps, live in a little over-crowded four-room tenement, where the water is out in the hall, the plumbing in the basement or under the sidewalk.

These people have been born in other countries and have been subjected to the enormous strain of traveling across the continent; they have crossed the ocean; they may have crossed the United States before settling

down. How many American families could do the same thing successfully? They have left a great many people with whom they worked and played and lived, but because they are foreigners and cannot speak the English language our provincialism prevents us from getting from them a great deal of good and cuts them off from what is best in us. We get no adequate conception of what it means to the average Polish or Lithuanian woman to leave her home to take that trip full of terrors and threatening evils, only to reach a country where everything is a little bit worse than what she has left and not at all as she anticipated it.

Another difficulty we have to contend with is that we speak to these women through interpreters. We have not made it possible for them to learn English, and many of them are eager to do so. Their spiritual isolation is enormous. They are like deaf persons in the midst of noise, they simply do not know what it means and they seem sullen and disinterested, whereas they are really frightened as well as lonely.

It is not a practical thing to wait twenty years while we train Jewish or Polish or Italian nurses and social workers. If we make it possible for these mothers and girls to learn simple English and encourage them to join in neighborhood activities, we could get at the root of our problem more quickly. I am not minimizing the difficulties of the teaching of English. But if any person can get around Paris with half a dozen words of French and ten fingers, the average Polish woman could get around Chicago with thirty words plus ten fingers. The bright ones do it; the average ones who do not do it are no worse than most of us who started a new language after twenty. They are human beings, fond of their homes and capable of development; generations of oppression may have dulled them a bit, that is all. They come to America to better their condition and we should try not to keep them hyphenated.

There is not so much difference between the educated Polish woman and the educated American woman, except that one has the advantage of the English language for her main use and the other has the disadvantage at first of no English. There is not much difference between the peasant laborer of Scotland, Ireland, England and Poland and the underpaid American workman. They seem different because their customs are different, their clothes are different, but, after all, give them four or eight acres of land, two generations of time, a college degree, a certain income plus a certain amount of recreation on Saturdays and Sundays, with the chance of an annual vacation, and the differences are not so startling. The first barrier of language is the greatest. America is, after all, a melting pot.

It has been my personal experience that the foreign born nurse of the same social group as her patient is from the first more handicapped than the American nurse who does not speak anything but English. Our foreign born look up to their American instructors. They like the comfortable sound of their own tongue, but they are both flattered and impressed when they hear it spoken brokenly by the American visitor. Let me mention in this connection two instances of foreign born nurses. One was a distinctly su-

perior woman, a woman of rank in her own country. The other was a simple girl with not much preliminary education. They were in the same district. The educated woman did things that the people thought were almost miraculous. They kissed her hand when she went out of doors. They obeyed her implicitly. The other nurse, who was, as far as nursing goes, just as efficient, just as conscientious, just as thoughtful and faithful, but unfortunately one of them was beloved but unappreciated. She proved infinitely more successful in an American district.

The problem of the foreign born woman and her child is going to be with us until we overcome our own provincialisms, until we improve her social as well as her economic status and until we grant her that welcome to our shores which we would ask were we, ourselves, to go as immigrants to the land of her birth.

Miss Katherine M. Olmsted, Chicago: I have had many different assistants in rural work among foreign people and I can understand why some women who speak different languages could not get along with people of their own nationality. I think we must have the more intelligent women and women of the higher class and higher standards than the people with whom they are expected to work. In America ability gives us rank, but in the old countries it is not ability, but class, and our foreigners still recognize class and its privileges even after they come here. And they will respect help and advice from some one they recognize as coming from a higher class when they will not from a person in their own social stratum.

In our work in Roumania recently when we had only eleven nurses and five hundred patients, we thought we could teach the younger women how to take care of patients. We could. They were very apt pupils. They did the most remarkable work under our instruction. Of course, we were limited in not being able to speak much of their language, but we could show them how to do the things of which they were capable. We soon discovered, however, that even though some of the women seemed to do much better work and learned better and quicker, as head nurses they were useless and because they were of the same class as the soldiers and servants. We had to take the women who were not trained so well in the work perhaps, but who belonged to the so-called upper class and could command respect, and they got along splendidly. We simply transmitted to them what we wanted done and the other people followed it without question, and I think that holds good to a large extent in this country. We cannot break them entirely from their old customs of class obedience and discipline. If we can train some of the foreign people of the higher type, able to command respect, in helping others we will not have trouble in their being accepted by their own people.

Mrs. Helen Palmerton, Dallas, Texas: In trying to get Mexican mothers to attend the infant welfare clinic, which was conducted by an American doctor and myself, at first we got some four to five Mexican mothers to come to the clinic and bring their children. After sixteen months ineffectual effort, I went to the mayor and health officer during the influenza epidemic and asked them for a Mexican girl, whether she was a nurse or not. They secured a girl who had some college training and was a very efficient inter-

preter and could understand and translate what we were doing for the Mexican women. We established an infant welfare station in the midst of the Mexican district and used this Mexican girl as an interpreter between the doctor and myself and the mothers who came to the clinic and brought their children. The number of mothers and children at the clinic increased very materially from time to time. We had fifty mothers with eighteen children over three years old and forty-seven babies. We held a clinic weekly and started charts for babies, weighing and measuring, and this girl, under our instruction during clinic day, visited the mothers and carried them the message which we had been trying to tell them all the time we had been interested in welfare work in that district. This girl has been able to explain to them in their own language the things we have been trying to explain to them. They have no fear of us and they see why we are trying to impress upon them the importance of different methods. From the aboriginal idea of pouring ink on the umbilicus, we have learned their idea was to use a styptic, and they are now learning modern methods from us. Of greatest pride to us is the decrease in "sore eyes" which, before our efforts began in this district, were almost universal and had not been considered preventable.

We are trying to teach them that milk is the diet for the baby, and we teach them the different modifications through this girl. We are expecting good results from these interpretations.

Mr. Davis (Closing): After listening to the various speakers, the fundamental question that runs through my mind may be summed up in one word, "understanding." In proportion as we have understanding of the people we are dealing with we will get somewhere in making them understand us.

I was talking with a Greek coffee-house keeper not long ago, a man who had been in the States for a number of years and who had seen a colony of Greeks begin with a few men and grow up into a large settlement. I asked him this question, "Why do you have Greek doctors and no Greek nurses?" His answer was: "In the first place, remember, we Greeks started off with hardly any women here. Women have since come over for one purpose; either they were married previously and come over to their husbands, or they come to get married here. These women are generally of a class which in Greece are not accustomed to much education. They have been accustomed to a subordinate place in the family life. They have not grown out of property status of woman kind. Such women will not start in to get a college or a high school or a nursing education in America. They could hardly become nurses without losing social standing. These people must be taught to break away from their traditions and superstitions under which their mothers have lived."

Unless we understand that point of view and that situation how can we go ahead with the program of developing Greek nurses or other professionals in that population? The same thing largely applies to the South Italians. My plea is to do everything we can to understand the people we are working for and working with. The mental effort of trying to understand somebody else is a difficult, but wholesome, undertaking.

REPORTS OF SPECIAL COMMITTEES

MRS. PUTNAM, Presiding

REPORT OF THE COMMITTEE ON VITAL AND SOCIAL STATISTICS

STILLBIRTHS

Since the last annual meeting at Richmond, the birth registration area has been enlarged by the admission of six states—Ohio, Wisconsin, North Carolina, Washington, Utah and Kansas—so that the birth registration area is now composed of 20 states and the District of Columbia, with an aggregate population of 55,813,338 persons, or 53 per cent of the entire population of the United States.

The tests of birth registration in the New England States have been completed and all six of these states found to be registering 90 per cent of the births. The outlook for rapidly increasing the birth registration area is excellent, but the thought expressed a year ago at Richmond needs repetition—that the cause of birth registration would be tremendously advanced if Congress would enact legislation making compulsory the registration of every birth.

The committee has been asked to make a report at the 1918 meeting upon a uniform definition of stillbirths and the steps to be taken to secure uniform methods of reporting stillbirths.

Much time and effort have already been spent in an endeavor to define a stillbirth satisfactorily, and I believe we should accept the definition already adopted as a Rule of Statistical Practice by the Vital Statistics Section of the American Public Health Association, namely:

Rule No. 17.—For registration purposes stillbirths should include all children born who do not live any time whatever, no matter how brief, after birth.

Rule No. 18.—Birth (completion of birth) is the instant of complete separation of the entire body (not body in the restricted sense of trunk, but the entire organism, including head, trunk, and limbs) of the child from the body of the mother. The umbilical cord need not be cut or the placenta detached in order to constitute a complete birth for registration purposes. A child dead or dying a moment before the instant of birth is a stillbirth, and one dying a moment, no matter how brief, *after* birth, was a living child, and should not be registered as a stillbirth.

Rule No. 19.—No child that shows any evidence of life after birth should be registered as a stillbirth.

The words "evidence of life" were further defined in the following resolution which was adopted by the Section in 1913:

Resolved, That the present Rules of Statistical Practice relating to stillbirths and premature births as adopted by the American Public Health Association in 1908 should be strictly followed by American registration offices, it being understood, in Rule No. 19, "No child that shows any evidence of life after birth should be registered as a stillbirth," that the words *any evidence of life* shall include action of heart, breathing, movement of voluntary muscle.

The laws of the various states in regard to reporting stillbirths vary greatly. The present situation is concisely shown in the following table:

STILLBIRTHS, 1917

	Uses separate blank	Reported as Stillbirths	Reported as Births and Deaths	Age at which Reported	All Stillbirths Reported
United States					
Alabama.....	Not before 5 months	..
Arizona.....	Yes	..	Yes
Arkansas.....	Yes	If advanced to 5th month	..
California.....	Yes	If advanced to 5th month	..
Colorado.....	Yes	..	Yes
Connecticut.....	Yes	Yes	..	..	Yes
Delaware.....	Yes	..	Yes
District of Columbia..	Yes	Yes	..	Passed 5th month	..
Florida.....	Yes	If advanced to 5th month	..
Georgia.....	Yes	If advanced to 5th month	..
Idaho.....	Yes	..	Yes
Illinois.....	Yes	Yes	..	If advanced to 5th month	..
Indiana.....	Yes	Of 7 months	..
Iowa.....	Yes (?)
Kansas.....	Yes	..	Yes
Kentucky.....	Yes	..	Yes
Louisiana.....	Yes	..	Yes
Maine.....	Yes	..	Yes
Maryland.....	Only Balto.	..	Yes	..	Yes
Massachusetts.....	Yes	..	Yes
Michigan.....	Yes	..	Yes
Minnesota.....	Yes	If advanced to 5th month	..
Mississippi.....	Yes	..	Yes
Missouri.....	Yes	..	Yes
Montana.....	Yes	Passed 4th month	..
Nebraska.....	Yes	..	Yes
Nevada.....	Yes	..	Yes
New Hampshire.....	Yes	..	Yes
New Jersey.....	Yes	Yes	..	..	Yes
New Mexico.....
New York.....	Yes	If advanced to 5th month	..
North Carolina.....	Yes	If advanced to 5th month	..
North Dakota.....	Yes	..	Yes
Ohio.....	Yes	..	Yes
Oklahoma.....	Yes	If advanced to 5th month	..
Oregon.....	Yes	If advanced to 5th month	..
Pennsylvania.....	Yes	..	Yes
Rhode Island.....	Yes	..	Yes
South Carolina.....	Yes	If advanced to 5th month	..
South Dakota.....
Tennessee.....	Yes	If advanced to 5th month	..
Texas.....	Yes	After 7th month	..
Utah.....	Yes	..	Yes
Vermont.....	Yes	..	Yes
Virginia.....	Yes	..	Yes
Washington.....	Yes	Beyond 7th month	..
West Virginia.....	(?)
Wisconsin.....	Yes	..	Yes
Wyoming.....	(?)
Alaska.....
Hawaii.....
Porto Rico.....

Although fully recognizing the importance of reports of stillbirths and also of uniform reports, it seems to the committee that the very first step toward securing such uniform reports is to put forth all our energies toward securing reports of living births. Until the desirability of such reports is fully appreciated it is not at all likely that it will be possible to secure uniform reports of stillbirths.

For states which now have good registration of living births, but which do not demand that all stillbirths be reported, the best method in the opinion of the committee will be for these states to request reports of all stillbirths of whatever period of uterogestation. For the present this should be a request and not a demand and the reasons why such reports would be of benefit to the state and in what way they would contribute to the general welfare of the Nation should be clearly stated in the request.

Later on after the physicians of the state have shown their willingness to comply with the requests, it will be time enough to consider the advisability of enacting a uniform law calling for such reports. Till that time it will be best to allow the laws to stand as they are, or when new registration laws are enacted to recommend that the law follow the outlines of the model registration law which calls for a report of a stillbirth if the child has advanced to the fifth month of uterogestation.

The committee in reaching these conclusions is simply following the lead of Dr. Charles V. Chapin, who, in 1915, had printed the following circular:

STILLBIRTHS

Definitions and Rules

This department has been asked many times for definitions of birth and stillbirths and for rules in regard to reporting. For several years the City Registrar has worked hard to obtain authoritative definitions. The American Public Health Association has approved a number of definitions and rules of practice some of which have also been adopted by the Federal Census Bureau. Some of these definitions have been sustained by the courts of England and this country. It is the intention of this department hereafter to follow the recommendations of the American Public Health Association. Among the approved definitions are:

1. A birth is completed only when the whole of the embryo is separated from the mother. This does not imply the severance of the cord or the expulsion of the placenta and membranes. It happened recently that a child's body was expelled at the residence of the mother, but the head was not removed till after the mother was taken to the Lying-in-Hospital. In this case according to the definition, the birth took place at the Lying-in-Hospital.

2. A living birth is one where, after the expulsion of the whole of the embryo there is

- (a) Any respiration, even a single inspiration
- (b) Any pulsation of heart or arteries
- (c) Any movement of voluntary muscles

Conversely if all of the above signs of life are lacking the birth is a stillbirth.

The above definitions determine what is a birth and what is a stillbirth and should be followed exactly. They are not only official definitions but are court decisions as well.

A question frequently asked is at how early a period of utero gestation is the premature expulsion of the embryo to be reported as a stillbirth. Following the recommendations of the American Public Health Association this office will

(a) Ask, but not require, that ALL stillbirths irrespective of the month of utero gestation, be reported as births on the usual birth blank. Unless the embryo has attained the age of six completed months of utero gestation the still birth will not be placed upon the record books and will not appear in the standard tables of stillbirths, but will be placed on file for future statistical use. The fee of twenty-five cents will be paid for each one of these returns just as if it were the report of a birth at full term.

If, however, a child born before the end of the sixth month shows any signs of life it must be reported.

(b) Require that stillbirths occurring after the sixth month of utero gestation be reported not only as births, but in accordance with the state law, must also be considered as deaths. A death certificate will have to be made out and a permit obtained from this office through an undertaker.

(c) Require that for all premature births whether stillbirths, or living births, the month of utero gestation be stated on the birth return.

Office of City Registrar,

Providence, December, 1915.

It seems, therefore, to your committee that we can not do better than to follow Doctor Chapin's lead and recommend that every registrar *ask* that all be reported, but that the Model Law be left as it is, not requiring reports "for a child that has not advanced to the fifth month of uterogestation." We do not think that the American people are yet ready for the public good to report every miscarriage any more than they are ready to permit an autopsy upon every decedent. In time the rights and wishes of the individual may appear less strong and everything be done for the public welfare, but to attempt at this time to enforce such advanced ideas would be a mistake. Let us first insist upon birth registration, which today is far from complete, and let us insist upon the registration of stillbirths which have reached the fifth month, and ask for, but not require the registration of earlier stillbirths.

DR. WM. H. DAVIS, Washington, D. C.,

Chairman

DR. W. J. V. DEACON, Topeka, Kansas,

DR. C. ST. CLAIRE DRAKE, Springfield, Ill.,

DR. WM. H. GULLFOY, New York, N. Y.,

DR. ROBT. M. WOODBURY, Washington, D. C.,

DR. F. V. BEITLER, Baltimore, Md.

REPORT OF THE COMMITTEE ON CONSERVATION OF THE MILK SUPPLY

W. A. EVANS, M. D., Chicago, Chairman

The milk supply of the country is increasing rapidly, even more rapidly than the increase in population. Nevertheless, there is a chronic continual shortage of milk for which two factors are in great measure responsible. One is the increased demand for milk from Europe and the other is an in-

creased use of milk products by adults. The increased demand from Europe is for milk powder, condensed milk, cheese and butter. This demand will probably keep up for several years if not permanently. The supply of milk cows in Belgium has been almost wholly destroyed, that of France, Germany, Austria and Italy has been greatly lessened while the cost of feed and the shortage of ships has made it necessary to materially lessen the number of milk cows in Holland, Denmark, Great Britain and other European countries. Certainly, the amount of milk produced in Europe cannot become normal within three years after society becomes stable, while it is not likely that the European appetite for cheese, milk powder and condensed milk will materially lessen. Porcher speaks in the *Press Medicale* of the new-born French appetite for cheese as a veritable cheese frenzy.

In this country adults are consuming more cooking milk, eating more condensed milk and milk powder and consuming more ice cream, butter and cheese. Oleomargarine and nut butters are destined to take some of the strain from butter but the use of other milk products, especially by adults, is destined to still further increase.

For many years the price of milk failed to increase *pari passu* with the increase in prices generally, and of other foods in particular. The reason lay in the lack of organization in the milk business. Latterly the price of milk and milk products has been increasing quite as rapidly or even more rapidly than other commodities. In 1907 the standard retail price of milk in Chicago was 7 cents and much of it was retailed at 6 cents. It is now 13 cents, an increase of about 100 per cent in 11 years. But of this increase five-sixths has occurred in the last nine years and one-half in the last year. The price paid the farmer for milk in the summer of 1907 was \$1.12 per 100 and \$1.45 in the winter. The present winter price is \$3.77 per 100. The price of milk to the farmer was \$1.67 April 21, 1916. By April 1, 1917 it had risen to \$2.12, and by October 1, to \$3.43. It is now \$3.77 and the farmers insist that they must have more. The price per quart to the producer rose from 3.6 cents April 21, 1916, to 7.4 cents October 1, 1917. It is now 8.1 cents. The above prices were furnished by the Chicago Health Department. The price paid for distribution has ranged between 5 and 6 cents a quart during the 11 years without any material advance. The farmers are learning the lessons taught by organized labor and are determined to follow along the same lines. My opinion is that the farmer will continue to perfect his organization and that, therefore, the price of milk will continue to rise. The only possibility of lowering the price consists in a radical overturning of the methods now employed in the milk business. In fixing the price of milk in 1918 the Food Administration very frankly admitted that their interest in the milk question lay in conserving the supply. The method followed by the United States Food Administrator in fixing the price of milk for a month was to consider that 20 pounds of bought cow food, 24 pounds of home grown cow food at market prices and 110 pounds of hay and three hours' labor were required for the production of 100 pounds of milk. That the proper price for 100

pounds of milk was the market price during the preceding month of each of these commodities. The remuneration of the labor was fixed at 30 cents an hour.

They wanted an increased production of milk and they encouraged such increase in the price of milk as would stimulate production. The only limitation which they respected was slump in consumption. To remedy this they staged a campaign of education in the need and advantage of milk as a food regardless of its price. I am informed that the use of milk has fluctuated greatly. At times the demand has reached the normal. This was in part due to the campaign of education alluded to and in part to the high family incomes which the shortage of labor and the demand for increased production has brought about. A large proportion of families have been able to pay the increased price for milk. No doubt the educational campaign has stimulated many of these to consume an increased amount of milk per capita. The combination has fallen heavily on the salaried people and others with a fixed non-advancing small income.

A year ago Dr. W. C. Woodward before this Association, and Dr. Joseph Neff before the American Public Health Association, called attention to the rapid increase in the death rate of children under 2 years of age from diarrheal diseases and sought to connote that with the rapid increase in the price of milk. Soon after it was argued in some quarters that this was coincidence rather than cause. I do not think that the death records of the year running from July 1st, 1917, to June 30th, 1918, fulfill entirely the predictions of Doctors Woodward and Neff. However, it is difficult to evaluate the gross effects from diminishing the milk supply and raising the price. Diminished use of milk results in stunting of growth, ricketts, susceptibility to disease and diarrheal diseases according to the authorities, and none of these causes are illuminated to any considerable degree by the facts disclosed in the vital statistics balance sheets except diarrheal diseases in children under two years of age. The best judgment we can form is based upon the impressions of pediatricians, visiting nurses, children's hospital authorities. But here, again, evaluation is difficult because of the rapid shifting in family incomes and great fluctuations in the demand for milk.

I can see no basis for a judgment as to what has been the effect in the increase in price of milk and the decrease in the supply available for children. I think we can all agree that it would be better if there was a freer use of milk by children between 2 and 20 years of age. And also that a lower relative price for milk is the best way to bring this about. Many of us hold that it is the only way to bring that about. Then all of us, on the one hand those interested in child welfare, and on the other, those interested in milk production, are anxious to know if there is not some way that this increased use through relative decrease in price can be brought about. The farmer, having tasted of the flesh pots and liking the experience, is not likely to lessen his askings. I think he has definitely launched on a program of unionism from which he will not be diverted. The only possibility of lessening

the price of milk is through change in the methods of marketing. The most promising of these is the use of milk powders. Milk powders are sold through grocery stores, and their practically universal use would overthrow the very elaborate, expensive, unique milk delivery machinery.

I was greatly interested, therefore, in the British and French reports on milk powders. I found that many clinicians were using milk powder in preference to liquid milk. Many communities, especially in England, were dispensing milk powder through infant welfare stations in preference to liquid milk. However, I am sure that milk powder will never drive liquid milk out of the market until the price is materially lowered and the quality is further improved. Some man with the point of view and the business acumen of Henry Ford could accomplish this in ten years. Under such method milk powder would not be retailed in small tin cans.

Condensed Milks. Among poorer peoples, especially, condensed milks are more popular than liquid milk in spite of all our teaching and educational effort. They are not cheap as compared with liquid milk. Here, too, a concern manufacturing or a marketing concern with a Henry Ford viewpoint could have made far greater headway since not even the cost of cans and canning plus the several grocers' profits should equal the cost of the retail milk delivery system. In spite of the high relative cost and the persistent educational effort the use of condensed milks for all purposes is increasing. The reason for its popularity in infant feeding is the convenience of its use. Condensed milk is bought in the grocery store on the carry plan and the item is charged on the weekly account. In the case of sweetened condensed milk the can is opened and the contents can be used up before it spoils even though there is no icing. In view of the evident practical advantages of condensed milk and the certainty that it will be increasingly used it might be worth while to experiment widely to discover a preservative that would be harmless, would not disturb nutritional balance as does cane sugar were it not for the probability that the use of milk powder will shortly overgrow that of condensed milks.

Other Stable Milks. There have been several proposals to so preserve in condensed liquid milk as to convert the product into a grocery store commodity. Among these are Buddeizing, electrical treatments and preserving with small proportions of formalin, boric acid and other preservatives. I do not know of any applications of these methods in a commercial way on a scale large enough to be of much service. The Presbyterian Hospital has used Buddeized milk for several years in its children's wards with satisfaction, but this does not give us much light on the commercial possibilities of the method. A less radical plan of solution is one which does away with the cross routing of the present milk delivery system. This method, first suggested, so far as I know, by Dr. J. R. Williams, of this committee, has been advocated by many, including the City Club of Chicago. It has many advantages but it has the disadvantage of causing inconvenience, loss and waste in the transition period without being radical enough to remain as a perman-

ent solution of the milk problem. It will certainly have the opposition of those in the milk business and the passive opposition of many others. If a fight for it was made and won it would not be many years before a fight for the next step would be necessary. Growth in the size of communities, growth in density of population, increase in the value of land are constantly pushing the milk producing areas farther away from the centers of consumption. This entails more and more complicated methods of marketing. While pasteurization has done all that was prophesied for is as a procedure for the prevention of milk borne infections it has not made it possible to ship milk satisfactorily without refrigeration and bottling from far away points not to greatly increase the complexities or time consumption of city distribution. The proposal has not made headway nor do I think it will.

Municipal ownership of the milk distributing machinery is just as logical as municipal ownership of water plants. For some communities this will be the method of securing good milk at a reasonable price.

Whatever the method adopted there must still remain the town cow, the individual cow, a certified milk supply and a supply of liquid for those who need them, must have them for one reason or another or who prefer them.

REPORT OF THE COMMITTEE ON TEACHING COURSES

MRS. MAX WEST, Washington, Chairman

At the Richmond meeting of this Association the following resolution was adopted, October 17, 1917:

Resolved, that the President of the American Association for Study and Prevention of Infant Mortality be authorized to appoint a committee to formulate courses in prenatal, maternal, child and infant care, which may be used by teachers in

Home economics in colleges, universities and normal schools

Graded schools

Clubs, classes, etc. (Little Mothers' Leagues, Mothers' Clubs, etc.)

The idea of offering formal courses in these subjects seems to have been growing in the minds of educators in various parts of the country for some time, and indeed in some instances practical and successful teaching courses have already been offered, as, for example, the correspondence course in infant and maternal hygiene given as a part of the Agricultural Extension Work of the University of Wisconsin or the work done in Home Economics Extension at the State Colleges of Agriculture at Corvallis, Oregon; at Logan, Utah; and at Ames, Iowa. But all these and similar experiments, successful and excellent as they are, were but isolated and unstandardized examples of the more extended and elaborated courses which must come before it can possibly be said that this subject is adequately covered.

While deliberating over what such a committee could hope to do, the whole matter was, in a way, most happily taken off our hands by a movement which has transferred it at once from the domain of discussion into

that of practical action. The history of this movement must constitute the report of your committee.

Early in the spring of 1918 the Children's Bureau received a communication from the Federal Board for Vocational Education asking the Bureau to co-operate with that Board in the preparation of outlines for a lecture course in Care and Child Welfare. The desire of the Federal Board, as explained by Miss Josephine Berry, is to offer a topical outline course with suitable reading references for one semester's work, three hours a week for home economic students in colleges. This is, of course, part of a vocational education plan to train teachers for high schools, but it is hoped that the course may possibly have a wider application.

The idea in the preparation of this course was to standardize the teaching on child care, and to have the presentation of child welfare cover all the important phases of childhood.

It has seemed, therefore, to your chairman that it would be a useless duplication of effort to ask a volunteer committee to do practically the same work at the same time, especially as Dr. Dorothy Reed Mendenhall was invited by Miss Lathrop to prepare these outline courses. Dr. Mendenhall has written and given such courses at the University of Wisconsin for some years, and would have been one of the most obvious selections for an outside committee. I have, therefore, asked Dr. Mendenhall to explain more fully than I can the nature and purpose of these courses.

DISCUSSION

Dr. Dorothy Reed Mendenhall, Washington, D. C.: Mrs. West's report brings up again the question of what institutions are giving courses on child care. Yesterday Professor Johnson mentioned Columbia as the only college giving such a course. Fortunately this is not accurate. For a number of years many state universities and several of our best normal schools have offered courses on the hygiene of the mother and the young child. The University of Wisconsin for the past nine years in the Department of Home Economics, has covered the care of the mother and the child in the course called Humanics, and for the past five years, through the University Extension, has offered correspondence courses in "The Care of the Mother," "The Care of the Child in Health," and "The Care of the Child in Disease."

At Columbia University, The Teacher's College Course, given by Dr. Josephine Hemenway Kenyon, is a most successful and adequate presentation, but it is not the first or only development of such work.

Popular courses for mothers have been developed as part of the educational side of child welfare work in our large cities, and courses for little mothers may be found in the curriculum of our grammar and high schools. When the Children's Bureau published the working program of Children's Year a little over eight months ago, the education of mothers, with a special effort toward making available to every mother information as to the best methods of child care was mentioned as one of the essential measures to be

worked for during the year. Specific mention was made of the necessity of promoting school, college, and university extension courses in child care.

It was, therefore, particularly gratifying to the Children's Bureau when the Federal Board of Vocational Education asked its co-operation in the preparation of outlines for a course to be given in colleges on child care and child welfare, as well as part time and vocational school courses to be given to mothers and young girls who wished instruction in the hygiene of the mother and the child. Miss Lathrop accepted the invitation of the Federal Board to assist them in their work and asked me to take charge of the preparation of this material.

The Federal Board realizes the great need of training teachers to present the subject of child care in normal schools and high schools. The conception of home economics is broadening every year, so that most courses in secondary schools now include more or less instruction in the hygiene of infancy and childhood, and even some teaching in maternal hygiene. Occasionally, as in the William Penn High School for Girls, in Philadelphia, a comprehensive course on the hygiene of the mother and the child is given to senior girls. The stumbling block to the development of this work is not the difficulty in having these courses introduced into the curriculum, but the difficulty in finding teachers adequately trained to present this material to young girls.

The Federal Board for Vocational Education is empowered under the Smith-Hughes appropriation to develop the teaching of home economics in all institutions under state control or supervision. At least seventy-five such colleges or universities are eligible for this aid and will be reached by the suggested outlines.

The problem of presenting the whole subject of child care and child welfare in fifty topics seems on the face of it a gigantic task, especially so since the Federal Board left to the discretion of the Children's Bureau not only the content of the course, but the form in which the material should be presented to the teachers.

It has seemed best to the different divisions of the Children's Bureau to have these outlines for a college course on child care and child welfare follow the four heads suggested by Miss Lathrop as the essentials for a child welfare program for the United States, since they cover the present urgent needs of our children. These heads are the protection of maternity and infancy; mother's care for older children; including adequate living income; the enforcement of child labor laws and full schooling for all children of school age; and decent recreation for children and youth.

It seemed that these headings gave a very good basis for the outlines contemplated, if the subject of child psychology and child training were added.

From this as a basis, we divided the material to be presented into seven divisions as follows:

1. Health Problems of Mother and Infant.
2. The Development, General Hygiene, and Feeding of the Child.
3. Problems Related to Safeguarding the Health of the Child.

4. Child Mentality and Management.
5. Recreation.
6. Child Labor.
7. Children in Need of Special Care: The Dependent, the Delinquent, and the Defective Child.

From five to eight topics are to be considered under each of these divisions. The outlines, which are to be made as brief as the subject permits, are not to be used directly as lessons, as they are not in a lecture form, but in the form of source material from which the teacher will plan her own course. Reading references accompany each outline, and a full bibliography to the whole course is contemplated.

Section IV, dealing with child psychology, is being prepared by Mrs. Helen Thompson Woolley, Director of the Vocation Bureau of the Cincinnati Public Schools. Mrs. Woolley's splendid work for Cincinnati insures that this section will be handled in a truly scientific spirit.

Professor George E. Johnson of Harvard University, whose interesting book, *Education by Plays and Games*, is well known, has consented to undertake the outlines on recreation. The other sections are being prepared by specialists in divisions of the Children's Bureau.

Our aim in preparing this course was to provide a standard set of outlines covering practically all phases, or at least all important phases of child life that will be suggestive to teachers who already have made a close study of child care, and that will also be helpful to teachers who are not adequately prepared to present certain sides of the question, but who wish to become better informed.

While different colleges and normal schools have offered adequate courses on certain aspects of the child problem, there is no school, college, or university in the country that has presented the entire field of child care and welfare. And yet at least an acquaintance with the different needs in these different fields of work is a necessary part of the equipment of every teacher of home economics who hopes to give any work on the care and feeding of children.

We realize that any one person could with difficulty be well prepared to give this entire course, but the outlines may stimulate the teacher's interest in the work, and give her an intelligent understanding of the whole subject, any part of which she may be dealing with in her classroom. Another use of the outlines is that they may serve as a standard by which the person who is in charge of the presentation of a course on child hygiene may judge if the teacher, physician, or nurse selected to give these lectures is giving as complete a course as should be presented.

Originally, it was intended to have all the sections finished so that the outlines should reach the different colleges in January in order that a course on the child should be presented in the second semester of this school year. The epidemic of influenza so disorganized the Bureau and our collaborators that we were not able to live up to this promise. The outlines on the mother

and infant and those on the special child are the only ones finished; these will be sent out in mimeographed form by the Federal Board some time in January.

When this project was suggested in June, we stipulated that these outlines should not be printed until they had been used one year. If the different sections were prepared by different persons, it seemed obvious that necessarily there would be considerable overlapping and that there might be gaps left which would have to be filled in. A composite work of this kind would demand considerable editing. In putting out the outlines first in tentative form, we had in mind the benefit to be received in the reaction towards this material by the college departments for whom this project was undertaken. Several questions have caused us some perplexity in preparing the first division on the mother and the infant. The subjects of the outlines in this section are:

1. General Considerations of the Child in Regard to Society and the Home.
2. Birth Registration and Infant Mortality.
3. Prenatal Care and Maternal Mortality.
4. Disorders and Dangers of Pregnancy.
5. Confinement.
6. The Lying-in Period.
7. The Nursing Period.
8. The Care of the Infant.

There is little doubt in my mind that the average college teacher of home economics will find these first outlines too technical. This reaction is probably due to the fact that these subjects are comparatively new to her and would not be so if she judged them by as severe a standard as she would apply to outlines on nutrition and feeding, material with which she is already familiar. For an adequate understanding of the background of infant mortality and many of our child health problems, we do not believe they are too technical or too full.

In the selection of material for the outlines, the question of what should be presented to college students on these topics has first to be considered. We are sure that to understand the importance and nature of breast feeding, and the problems of early infancy, the young teacher must know the fundamentals concerning pregnancy, confinement, and the lying-in periods. Yet there is always the danger that a young student with a little knowledge of a great many things may place the emphasis on the wrong side when it comes to her selection of what should be presented to the immature girl, the pupil she will meet in her high school classes. It may be necessary to accompany the outlines with a foreword to the college teacher as to how she should use the material, how much of it she should give to her pupils, and how much of it is to be used for her own information and background.

Undoubtedly suggestions should be made to the teacher as to her choice of lecture topics, what topics should be assigned to the pupils for research work, and what class-room demonstrations should illustrate the lectures.

Our hope is that after these outlines have been used for a year, and modified and adapted to meet the suggestions of the colleges or to their needs, we may have, when they are put in permanent form, a valuable contribution for the training of the teachers who are to present to the coming generation in our schools the principles of infant and child hygiene and feeding.

Mrs. Putnam: Dr. Mendenhall's exposition of the subject has been most interesting. I cannot but feel that the solution of the problem of child care in the future lies in the education of the mother, and that education must be begun early. I struggled for many years in my own state to introduce such a course into the upper grade grammar school, but without success. Many girls do not go beyond that, so we have to begin before they leave those grades.

Dr. E. J. Huenekens, Minneapolis: It is very important that the matter contained in these outlines of courses is such that we can all get behind it; that it shall contain matter upon which we can all agree. Part of the work that must be taken up in connection with this subject is entirely technical and should be handled by technical experts, pediatricians. I think it is very important that such a committee to outline this course be represented by pediatricians, and I think it would be a good suggestion that after the committee has outlined such a course that it be placed before a committee of the American Medical Association and a committee of the American Pediatric Society for their approval. I think we make a mistake in getting up such a course which does not have technical experts behind it. It should be something upon which we can all agree and be sure of our ground, rather than get it out and find some opposition to it after it is published.

Chairman: Do you think obstetricians should be represented?

Dr. Huenekens: Yes. I think both the pediatrician and the obstetrician should be represented.

Dr. Dorothy Reed Mendenhall, Washington, D. C.: It is evident that I have not made myself clear. The Children's Bureau was asked by the Federal Board for Vocational Education to prepare these outlines for a college course on child care and child welfare. This certainly was a perfectly suitable request, as the Children's Bureau was assigned by Congress the whole field of child welfare, and the Bureau promptly decided to undertake this work.

The idea of such a course did not originate with us, but is a part of the new development of vocational education in this country.

The different divisions of the Children's Bureau, the divisions of child hygiene, industry, social service, and child labor are made up of technical experts on the child problem, if there are such things. We have, of course, obstetricians and pediatricists on the Bureau staff, but we do not feel that the medical side is the only angle from which the complex problem of child care should be approached. A deep knowledge of the economic and social basis of child welfare should surely be a part of any such presentation as is contemplated in this college course.

Special experts on child psychology and recreation were called in by the Bureau to prepare these two sections.

In the preparation of the outlines on health problems of the mother and infant, which I have done myself, I have asked the advice and criticism of some of the best men in the medical profession, as well as of the physicians on our own staff.

As to the suggestion that such a course with such a broad content should be prepared by a committee of either obstetricians or pediatricists, I should very much doubt if it would be possible for a group of specialists, whose opinions are bound to differ on many important points, to put out a set of topical outlines on child care that would be of much use to the college teacher.

It is important that educational material shall not represent any sectional viewpoint, such as may be found today in Boston, New York, Chicago, or San Francisco, in regard to certain medical problems. The Children's Bureau can take no side in any such controversy, whether it is the midwife question or the feeding interval, but must weigh all that discussion and present both sides of any well taken argument. In this way, and with the advice and criticism of outside specialists, I think, on the whole, we ought to be able to turn out more valuable material to be used in the preparation of a college course on the child than could be prepared by any committee representing a single profession.

It is hoped that these outlines may find a wider application than use in college teaching. There has been a great demand from women's clubs and from study groups for outlines or selected reading on different aspects of child welfare. The women of the United States are going to be a great factor in our reconstruction work. In the different divisions of this course, particularly the outlines on child labor and the special child, and in the bibliography, the educated woman may find guidance in the solution of the particular aspect of child welfare that appeals to her, or that fits the need of her community.

REPORT OF THE COMMITTEE ON PROCEDURE AND RECORD FORMS

BY THE EXECUTIVE SECRETARY

It is well known by the majority of the members of the Association that with the idea of standardizing procedure, preparation of suitable record forms was undertaken early in the history of the Association.

The first form dealt with prenatal care and was prepared by a committee of which Dr. J. Whitridge Williams, head of the Department of Obstetrics of the Johns Hopkins University, was chairman. That form was submitted to the Association four years ago and it is now being used by several obstetrical hospitals and a number of infant welfare associations. After having been tried out at the request of Miss Crandall, Executive Secretary of the Public Health Nursing Association, by a number of nurses in different parts of the country to test its applicability to general nursing work, the use of the record

form was also recommended to nurses engaged in public health work, by the Executive Committee of the Public Health Nursing Association, at the annual meeting of that Association at Cleveland last spring.

The next step in the preparation of record forms was the completion under the chairmanship of Dr. Williams, of a blank for obstetrical care. This form has not been printed but typewritten copies of it may be obtained upon application to the office of the Association.

The third step was the preparation of a record form for postnatal work. A committee was appointed in 1917 with Dr. J. H. M. Knox, Jr., as chairman. The initial draft of the form was completed before Dr. Knox went abroad. During his absence Dr. Joseph S. Wall, of Washington, served as acting chairman. The work of the committee was completed during the past summer and the publication of the record form was authorized by the Executive Committee. Copies of the form were mailed to all of the members of the Association who were interested in postnatal care. Copies may be had on application to the executive office of the Association. Copies can also be furnished in quantity by the Association at the cost of printing. It is hoped that all of the organizations connected with the Association, that are engaged in infant welfare work will try out the forms experimentally, at least, so that their virtues and defects may be tested by practical application.

Chairman: It is desirable that these record forms be used as generally as possible, both for the purpose of standardizing procedure and of securing a uniform basis for our statistical reports.

The recommendations of the Committee regarding procedure and a copy of the postnatal care record form, follow:

RECOMMENDATIONS OF THE COMMITTEE ON PROCEDURE AND STANDARD RECORD FORMS

PURPOSE AND SCOPE:

A. Individual Interests—(Secured by public and personal education)

1. To promote intelligent motherhood, including prenatal care and to foster maternal nursing
2. To keep well babies well
3. To prevent sickness and death in early infancy
4. To place babies under the supervision of infant welfare agencies as early as possible
5. To prevent the ailments of infancy and early childhood, particularly those which handicap or lead to defects and disabilities in later life

B. Allied Interests:

To promote the establishment of, and to co-operate with agencies whose aid is essential, such as

3. Equipment

Waiting room

Conference room provided with scales, charts, tables, chairs, running water, etc.

PROCEDURE**A. Registration:**

- a. Of the mother and new born baby through
 1. Hospitals and dispensaries
 2. Organizations doing prenatal and obstetrical work
 3. Health department birth records which will usually be sent directly to the infant welfare organization on application to such departments
 4. Instructive visiting nurse
 5. Scouting visits by the station nurse.
- b. Of the older children not reached through the above sources
- c. Of the older children under school age

B. Supervision:

Each child to remain under active medical and nursing supervision until it has reached school age. Supervision to be exercised through

- a. Infant welfare conferences held for well babies once a week or oftener according to the especial needs of the district and the number enrolled. (It is rarely possible for one physician and one nurse to care for over 30 babies at a conference.)
- b. Follow-up visits of the nurses to the homes, to see that the advice of the conference physician is carried out, to instruct in milk modification, and in some instances, to give nursing care to the sick babies
- c. Care of the sick babies in their homes, in hospitals or dispensaries, referring them to family physicians
- d. Periodical examination and follow-up care of children up to school age

C. Frequency of Visits:

- a. By the mother to the conference for well babies
 1. In the case of the normal breast fed baby, the baby should be brought to the conference every other week
- b. By the nurse to the homes

The number of babies that an individual nurse can care for adequately will depend upon the physical condition of the babies; the size of the district; economic status of the families; race and general intelligence of the mothers. It is not believed that a nurse should have more than 100 babies on her list. The number of visits made cannot be regulated by

1. Bureaus of Child Hygiene and Health Departments
2. Organizations and hospitals doing prenatal and obstetrical work
3. Instructive visiting nurse associations
4. Children's hospitals and dispensaries
5. Infant boarding homes and their inspection
6. Milk inspection
7. Day nurseries and their inspection
8. Convalescent homes for children
9. Medical and nursing schools
10. Boards of children's guardians
11. The associated charities organizations
12. Playgrounds and recreational centers
13. School nurses and medical inspection of schools
14. The Juvenile Court
15. Institutions for the care of the dependent and feeble-minded child
16. Child labor organizations

ORGANIZATION

A Central Infant Welfare Association (the affiliation or close co-operation between this organization and organizations engaged in instructive visiting nursing, prenatal work, maternity hospitals, and hospitals for the care of sick children is essential to efficient work.)

A. Staff:

Medical Director with special training in infant welfare

Supervising nurse with similar training

Staff nurses and conference physicians, the number to be regulated by the number of districts to be covered and the specific problems of these districts.

B. Welfare Conferences:

1. Establishment of welfare districts with central stations based on the consideration of

Population (general)

Infant death rate

Economic status

Physical or other characteristics of the area to be covered

(It is estimated that in a congested district there should be one welfare center to each 5,000 population, as this would represent an infant registration of approximately 125.)

2. Location

Each station should be located at some central point, preferably in a public school, or neighborhood center, settlement houses, etc., in order to emphasize the educational and communal character of the work

hard and fast rules, but will depend upon the needs of the individual babies, the area to be covered, the initiative and other qualities of the nurse, the weather, seasonal needs, etc.

MAINTENANCE

1. As a state or municipal agency in the interest of public health and exclusively financed by the Health Department, or by the Bureau of Child Hygiene of this department
2. By grant of money from the state, county or city government in addition to the funds contributed from private sources
3. By organizations financed by private contributions alone

(Organizations engaged for some time in infant welfare work have not found it necessary to dispense milk from the stations, either free or paid for, and some have substituted the name "center" for that of "station," which for many years was synonymous with "milk station." Some centers are partly self-supporting by a graduated fee system of from 5 to 10 cents per visit. Others are free to all who apply.)

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AMERICAN ASSOCIATION
FOR
STUDY and PREVENTION
OF
INFANT MORTALITY
NOW
The American Child Hygiene Association

TRANSACTIONS OF THE NINTH ANNUAL
MEETING

CHICAGO, DECEMBER 5-7, 1918

PART IV—Reports of the Affiliated Societies, Member-
ship List, Index

Headquarters of the Association
Medical and Chirurgical Faculty Building
1211 Cathedral Street, Baltimore, Md.

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**AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT
MORTALITY**

(now)

THE AMERICAN CHILD HYGIENE ASSOCIATION

(Headquarters, 1211 Cathedral Street, Baltimore, Maryland)

**Suggested Outline for Report of Affiliated Societies for year ending
September 30, 1918**

Reports were asked for in accordance with Article X of the By-Laws. The readings given below were intended to be suggestive only, and the Affiliated Societies were asked to include in their reports, brief descriptions of distinctive features of their work which were not touched upon in the outline. Unless otherwise designated, the statistics are for the year ending September 30, 1918. Marginal figures in the reports which follow, refer to corresponding ones in the outline.

- I. Name and address of organization.
- II. When organized.
- III. Problems in Infant and Maternal Work Rendered Acute by the War.
 - What have been the most difficult problems you have had to solve during the past year?
 - As a result of war conditions, have you found it necessary or desirable to make any changes in your work? If so, along what lines?
- IV. Medical and Nursing staff.
 - Under normal conditions how many doctors and nurses are on your staff?
 - Nurses:
 - Doctors:
 - Number who were paid for their services?
 - Number who gave their services without charge?
 - How many of your nurses have gone into war service?
 - What have you done to replace them?
 - To what extent have you used nurses aides or volunteers?
 - How many of your medical staff have gone into war service?
 - What have you done to replace them?
- V. Effect of General Advance in Wages Upon Standards of Living; Upon Health and General Welfare of Mothers and Babies?
 - What has been the effect of the general advance in wages upon the standards of living of the families with which your organization is in touch?
 - What effect has the advance in wages had upon the health and general welfare of the babies?
 - Has there been less illness among the babies?
 - Has there been less illness among the older children, as a result of the easier financial circumstances of the families?
 - What effect has the advance in wages had upon the care which is given by the colored mothers to their infants and young children?
 - By the mothers of foreign birth? (If possible, state nationality of the groups of mothers;—for instance, Russian, Polish, Lithuanian, etc., in answering this question.)

VI. Wages and the Milk Situation.

Has the amount of milk bought for babies and children increased or decreased?

VII. War Service.

What work is your organization undertaking for the promotion of infant and maternal welfare as a war measure?

Approximately how many of the mothers who are reached by your Association are engaged in gainful occupations outside of their own homes?

What is the percentage of mothers so engaged to the total number cared for?

Does this represent an increase or decrease over the number normally so employed?

What provision does your Association make for the children of mothers thus employed?

VIII. Children's Year Campaign.

What work is your organization doing in the Children's Year Campaign?

If your organization has conducted examinations of babies and children according to the Children's Bureau plan, have you undertaken any follow up work?

IX. Care of Children of Pre-School Age.

What supervision do you give children of pre-school age?

X. Financial.

Total budget for the current fiscal year?

How is your organization supported?

By membership dues?

By appropriation from city or state?

By special contributions?

Have you had to make a special appeal for funds during the last year?

What method or methods have you found most successful in raising funds?

Do you insert paid advertisements in your local papers?

Is any part of your income raised by gratuitous "newspaper campaigns?"

If so, approximately how much?

Is the work that is done by your Association given free of charge or do you ask a fee or contribution?

Amount of fee if one is asked?

If your services are rendered without charge, do you find that the mothers, whose financial circumstances have been improved by the advance in wages, continue to attend your conferences and ask your advice?

What has been the effect if a charge has been made for your services?

XI. Affiliations.

In what way does the work of your Association couple up with that of other local organizations?

With national organizations?

With Bureaus or Departments of the Federal Government?

In what way does your work couple up with the city or state departments of health?

Have you a division of child hygiene in your city? In your state?

XII. Statistical.

a. Prenatal Care.

Total number of mothers cared for during the year?

Average number of months under care?

Total deaths of mothers?

During pregnancy

At childbirth

During the puerperium

Total number of infant deaths?

At birth

During first month

During the first year of life

During what month of pregnancy do the women come under care?

Average cases

Earliest case

b. Midwives.

Approximate percentage of births in your city or town attended by midwives?

Percentage of babies on your roll whose births were attended by midwives?

c. Postnatal Care.

Age limit of babies or young children under care?

Total number under one year cared for?

Total number between 1 and 5 years cared for?

Total number of infant welfare conferences each week?

Average number of babies in attendance each week?

How early in the child's life is it brought under your care?

Average cases

Earliest case

What percentage of the babies born in your city or town during the calendar year or during your fiscal year came under the supervision of your organization?

What percentage of the babies born within the last calendar year, in the districts covered by your organization, have come under the supervision of your Association?

d. Total births in your city or town for year ending Dec. 31, 1917.

Total deaths under 1 year in your city or town for year ending Dec. 31, 1917?

What percentage of the deaths under 1 year that occurred during the last calendar year in the districts covered by your Association were *not* on the rolls of your Association?

Has there been an increase in the death rate among children under 1 year in your city or town in the last year?

XIII. Recommendations.

If there has been an increase in infant mortality or infant morbidity in your state or town during the year ending September 30, to what do you attribute it?

What do you suggest as a means of combating it?

CANADA

AFFILIATED BABY WELFARE STATIONS (ENGLISH)

Montreal

II. Organized, 1917.

III. Our most difficult problem has been to secure adequate professional assistance. As a result of war conditions we have found it necessary to open new stations and have developed our work intensively, particularly along educational lines, through the establishment of Little Mothes' Leagues, and through lectures, movies and pamphlets.

IV. Staff—Nurses: 10 R. N.; doctors, 9.

VI. The amount of milk purchased for babies and children has increased.

VII. About 15 per cent of our mothers are engaged in gainful occupations outside of their own homes.

VIII. We are co-operating actively in the Children's Year Campaign.

X. Total budget for current year, approximately, \$30,000. Our Association is supported by membership and special appeals. Our work is mostly free. In certain cases actual cost of material is charged.

XII. Age limit of the children under our care is 24 months and under. Total number under 1 year of age cared for, 980. We carried on 20 welfare conferences each week. The average age of the babies when brought to us is 3 months. The earliest age at which a child was placed under our care was 2 days.

10 per cent of the babies in Montreal came under our supervision this year, and 20 per cent of the babies born within the last year in the districts covered by our Association, have come under our supervision.

Total births for the year ending December 31, 1917, 19,664. Total deaths under one year, 3,488. This was a decrease of 184 in the figures for the preceding year.

RESUME OF MONTHLY REPORTS OF BABY WELFARE STATIONS (ENGLISH) MAY-OCT. 1918

				Univer-	Found-	Iver-	Chal-	St.	Fletcher's Ver-			
				sity	ling	ley	mers	Ann's	Mt. Maison	Royal	neuve	Camp dun Opened June July
Babies on Books	May	102	75	51	49	33	31	22	..	..	..	..
" " "	June	112	72	..	49	42	47	27	70	..	..	..
" " "	July	130	77	88	64	50	64	37	238	70	..	..
" " "	Aug.	126	86	106	76	52	81	47	371	70	..	..
" " "	Sept.	132	76	119	92	56	86	44	..	89	..	..
Old Cases	May	87	63	41	35	27	32	12	..	..	..	..
" " "	June	102	71	..	48	33	31	22	68	..	..	..
" " "	July	112	71	66	53	42	47	27	238	..	..	..
" " "	Aug.	137	77	88	64	50	64	87	..	22	..	..
" " "	Sept.	126	86	110	79	52	81	47	..	71	..	..
New Cases	May	15	12	10	14	9	7	10	..	..	..	..
" " "	June	25	14	..	4	12	16	7	72	..	..	..
" " "	July	25	19	26	11	18	17	10	181	22	..	..
" " "	Aug.	29	22	27	15	11	18	18	133	49	..	..
" " "	Sept.	10	11	18	4	10	5	11	..	21	..	..
Clinics Held	May	6	15	4	3	5	4	9	..	..	..	..
" " "	June	8	13	..	4	4	6	12	13	..	..	..
" " "	July	18	13	12	5	4	8	12	31	4	..	..
" " "	Aug.	18	13	13	4	5	8	14	31	11	..	..
" " "	Sept.	9	10	6	5	4	6	9	..	11	..	..

Clinic Attendances....	May	47	87	51	75	75	28	40	..	..
"	June	80	89	..	68	99	47	48	72	..
"	July	97	121	100	72	98	82	48	208	26
"	Aug.	126	132	118	72	96	89	52	171	98
"	Sept.	83	86	84	85	47	35	35	..	77
Special Treatments...	May	10	..	2	7	..	15	..	..	..
"	June	8	..	6	..	14	18	3	1	..
"	July	66	6	34	10	..	67	..	18	4
"	Aug.	73	14	24	42	..	48	..	18	10
"	Sept.	14	10	25	..	..	..	2	..	9
Nursing Visits	May	61	180	46	77	58	145	24	..	..
"	June	141	196	..	66	89	101	75	..	..
"	July	208	201	118	82	101	170	153	..	99
"	Aug.	198	213	129	109	104	151	112	..	223
"	Sept.	137	188	114	..	79	121	110	..	221
English .....		..	..	..	..	..	..	..	..	..
English-speaking		177	80	41	32	27	115	76	85	83
French-speaking		71	..	6	9	7	16	25	9	8
Foreign		259	230	4	6	11	10	2	159	1

RESUME OF "MOVING CLINIC" (AUTO)

September, 16th and 18th, 1918: Point St. Charles; 35 babies; weather fair.

September 17th, 1918: Maissonneuve; 10 babies; weather, cold and rainy.

September 19th, Verdun: 5 babies; weather cold and rainy.

St. Henry: 5 babies seen inside one hour; rain and cold.

The above resume was compiled from the Monthly Reports sent in by the affiliated nurses to the Secretary, after having been corrected by Miss O. DeLaney.

W. A. L. STYLES, M. D., *Secretary*.

BUREAU OF CHILD WELFARE, PROVINCIAL BOARD OF HEALTH, ONTARIO Toronto

The Bureau of Child Welfare was established October, 1916.

III. Because of war conditions, we have been emphasizing the necessity for child welfare work throughout the Province along the line of education and exhibits.

IV. The Chief Officer of Health is the Executive of the Board and we have to date no special physicians for the Bureau. Nurses, 1, appointed November 1st, 1917.

VII. We have laid especial emphasis, as a war service, upon the necessity for municipal effort throughout the Province, to promote maternal and child welfare.

IX. The care of the pre-school age child is given particular attention in all our Exhibit work.

X. To date no special appropriation has been set aside for Child Welfare work. The funds for the nurse, transportation and equipment of Exhibit have been taken from "Public Health Exhibit and Tuberculosis Exhibit" votes. The work is given free of charge.

XI. We work in conjunction with:

a. Provincial Departments—

1. Neglected children
2. Hospitals and Public Charities
3. Women's Institutes (Department of Agriculture)
4. Education Department

b. Local Agencies in the centre where our Exhibit is shown—

1. Schools
2. Hospitals
3. Children's Aid Society.
4. School Medical Inspectors
5. Nurses
6. Dentists
7. Local Board of Health and Medical Officer
8. District Nurses and other social agencies.

XII.

b. There is no statutory provision for the work of midwives in Ontario.

d. Province of Ontario	1917	1916
Number of Live Births.....	62,666	65,264
Number of Still Births.....	2,486	2,698
Deaths under one.....	5,791	7,000
Infant Mortality rate.....	92.5	107

XIII. The infant mortality rate fell from 107 in 1916 to 92.5 in 1917. We do not feel in a position to definitely state the cause for this decrease.

MARY POWER, *Director Bureau of Child Welfare*

CALIFORNIA

BABY HOSPITAL
Berkeley

The Children's Year Committee for Alameda County, which numbers representatives from the Baby Hospital Board among its members, is preparing for a general weighing and measuring drive for babies under six, to be held during the latter part of October and all of November (1918).

This weighing and measuring of babies is to be carried on as far as possible at health centers already established, such as the Baby Hospital Clinic and The Berkeley Dispensary. The weighing and measuring as in the June drive is to be done by doctors and nurses under Government regulation and the results entered on Government score cards provided for the purpose.

Because of the tremendous number of babies brought during the first drive, to be weighed and measured at the Baby Hospital centers, it was impossible to make appointments or do more than make the most rapid examination of the children. But arrangements are now being made establishing a much greater number of centers and planning for appointment cards to be obtained at the various centers. These cards will be filled out by the mothers and returned by them to the committee who will make the appointments in the order they are received. This plan will make it possible for mothers to have the privilege of a consultation with the doctor and nurse which it is hoped will be valuable to the infant health of the community.

The State Chairman, Dr. Adelaide Brown, and the Children's Bureau are both explicit that the weighing and measuring drives while they are important as obtaining statistics for the government are to be only one of the activities of these "health centers," which it is hoped will be the permanent result of the children's year campaign. The Baby Hospital Clinic is already such a center, and not only for sick children, for a Well Baby Conference is held every week—the babies weighed and measured and advice given the mothers as to how to keep them well. But the great need of the county is to establish these centers in the more rural and outlying districts, and the Baby Hospital hopes that its funds this year will permit of extending its usefulness further and further into the county along the lines proposed in the Children's Year program.

BABY HYGIENE COMMITTEE
San Francisco

I. The Baby Hygiene Committee of the Association of Collegiate Alumnae was formerly the Certified Milk and Baby Hygiene Committee.

II. This committee's chief work has been with the Associated Charities of San Francisco.

In 1908 appalled by the infant death rate in institutions (59.7 per cent) the Associated Charities placed their babies in foster homes, thereby in one year reducing the mortality to 12.5 per cent.

In 1909 this committee began its co-operation. It makes possible the use of certified milk while their physicians give the clinical and medical care. The table below speaks for the work.

77 babies in foundling asylum,	1907-09.....	59	per cent
72 babies in foster homes, feeding and care			mortality
not regulated. Food, regular commercial			
milk	1903-09.....	12	"
164 babies in foster homes, food certified milk,	1909-10.....	8.5	"
168 " " " " " " " " " " " " " " " "	1910-11.....	5.3	"
214 " " " " " " " " " " " " " " " "	1912-13.....	3.28	"
230 " " " " " " " " " " " " " " " "	1913-14.....	2.8	"
278 " " " " " " " " " " " " " " " "	1914-15.....	2.6	"
262 " " " " " " " " " " " " " " " "	1915-16.....	2.67	"
245 " " " " " " " " " " " " " " " "	1916-17.....	3.67	"

III. & IV. There are two physicians on the staff and three on the advisory committee, all working without remuneration. One of our physicians was asked to go to France under Dr. Lucas but elected to do charitable work in San Francisco instead. The follow-up work has been done by nurses employed by the Associated Charities. Such being the case we can make very little report on the war problems.

V. and VII. In November 1918, we opened a Children's Health Center to reach a larger field and teach proper feeding and hygiene of children. We give no medical treatment, referring all such cases to hospitals or equipped institutions. Ours is distinctly a well-babies' clinic.

The class we reach is the border-line group who are self-supporting except in emergencies, too proud to accept charity, but eager to be taught how to keep their children well.

VI. While wages have advanced in San Francisco there has been a very sharp increase in the price of milk. Many people have eliminated milk from the children's diet entirely on this account.

The climatic conditions in 1918 in California rendered it difficult for many dairymen to stay in business. And there is a milk shortage in San Francisco at the present time and not enough certified milk for those who can afford to pay for it.

VIII. Dr. Adelaide Brown, of our advisory committee, is California Chairman of Children's Year and this committee was made San Francisco Chairman.

Health Centers. During June there were thirteen centers in San Francisco which co-operated with this committee giving a complete medical examination as well as weighing and measuring 4,000 children. Ten of these centers were those institutions already equipped to do intensive children's work and so arranged to do follow-up work.

Children's Year Committee stimulated the establishment of 2 new health centers in 2 new districts heretofore unprovided for.

The June Drive showed the great need of well-babies' clinics—centers to teach proper nutrition. For our next drive we have arranged to co-operate not only with all institutions doing children's work but have been able to stimulate many neighborhood agencies to help us in our work. We have at

least 30 centers for the next drive and as a result we have reason to hope that there will be 12 permanent well-children's clinics instead of 4 in all parts of the city.

X. Our total budget for the current fiscal year is as follows:

August 1917—September 1918	
Total receipts	\$2,911.60
Expenses:	
Postage and printing.....	\$248.50
House rent and expenses.....	377.07
Certified milk	1,390.00
Nurse	150.00
Red stockings	30.92
Miscellaneous	39.80
Children's Year	125.87
Total	<u>2,462.16</u>
Total on hand, September, 1918.....	\$ 449.44

We are supported by subscription, as follows:

Life memberships.....	\$100.00
Active Membership, per year.....	25.00
Sustaining Membership, per year.....	10.00
Regular Membership, per year.....	5.00
Associate Membership, per year.....	3.00

This is raised by an annual letter of appeal and a report sent at Christmas time.

In addition we have a Junior Christmas League composed of children who fill with pennies small red stockings sent by the committee at Thanksgiving time. We have never used any advertisements in the papers, but have always been able to get any publicity we wanted from the San Francisco papers. We charge no fee for any of our work.

XI. Affiliations. We are affiliated with the Associated Charities of San Francisco and are a committee of the Association of Collegiate Alumnae.

We have no Child Hygiene Bureau in San Francisco but have a baby hygiene nurse who was chosen by the committee and whose salary was paid by us for the first year.

We hope the program for Children's Year will aid the San Francisco Board of Health to get an appropriation for a Child Hygiene Bureau. The efforts of Children's Year in California by Dr. Adelaide Brown have hastened the establishment of such a Board under the California State Board of Health.

XII. a. We have no prenatal work.

b. In order to give definite information, as to the approximate percentage of births in this city attended by midwives, we have checked over the births for the months of October and November, 1918, and find that of the total number registered during these two months 11 per cent of the cases were attended by midwives. 734 births, November, of these (26 Japanese)—85 were attended by midwives. (59 Italian.)

c. Age limit of children under our care is 2 years.

Total number under 1 year, 150.

Total number under 2 years, 230—47 over 2.

Two infant welfare conferences each week.

Average attendance each week, 45.

Average cases under our care at age of 3 weeks.

.03 per cent of babies born in city under our care.

- d. Total births in city for year ending Dec. 31, 1917, 7,990.

Total deaths under one year to above date, 588.

"The total number of deaths of children under the age of one year from January 1 to November 30th, 1918, is 419, this total including 30 deaths from influenza. For the calendar year 1917 there were 588 deaths under the age of one and if the same ratio maintains through the month of November, there will be a very marked decrease shown in the mortality of children under the age of one year as compared to the two years immediately preceding."

(MRS. ALFRED) EMMA McLAUGHLIN,

San Francisco Chairman, Children's Year Committee

CONNECTICUT

VISITING NURSE ASSOCIATION AND INFANT WELFARE ASSOCIATION JOINT REPORT New Haven

I. & II. Infant Welfare Department of the Visiting Nurse Association, which holds also the legal title, the Infant Welfare Association of New Haven, was organized in 1909, and united with the V. N. A. in 1917, though preserving its identity as a chartered organization.

III. The most difficult problem has been the absence of mothers from the homes because they are working.

Our work has continued along the usual lines.

IV. Nurses on the staff, 5; doctors on the staff, 4, no one of whom is paid. No Infant Welfare nurse is in war service.

We have used 5 nurses' aides and one volunteer.

One doctor went into war service and was replaced by another.

V. The high wages have enticed mothers, who could have lived better than before, to go out to work. On that account the general welfare of the babies improved little, if at all. A better grade of milk is being used and there was less diarrhoea this summer than formerly. Fewer older children have been ill. There has been no noticeable change in the care of colored mothers and those of foreign birth.

VI. The sale of milk for babies and children has increased.

VII. The organization follows its usual line of development, none of its undertakings being merely a war measure.

No special provision has been made for the children of the large number of mothers employed in gainful occupations; the day nurseries have dealt with this problem.

VIII. The V. N. A. conducted the Baby-Saving Campaign in June under the State Council of Defense and is following up the children registered.

IX. The V. N. A. tries to supervise all children on its lists up to six years of age.

X. Expenses of the Infant Welfare Department, October 1, 1917-September 30, 1918, \$10,949.93. Support is given by membership dues and special contributions and not at all by the city or state. A campaign of four days' duration last May raised, through personal solicitation, the extra amount necessary for the year's work. A part of this fund raised by the V. N. A. was for infant welfare work. Paid advertisements are not inserted. There have been no gratuitous newspaper campaigns.

If the family can afford it, a fee of fifty cents is charged. Most mothers expect to pay care-fare at least. Institutions, such as the Metropolitan Life Insurance Company, pay the cost of visits to their patrons. Free and pay patients seem equally interested.

XI. The V. N. A. co-operates with the Dispensaries, the Employees' Tuberculosis Relief Association, the Crippled Children's Aid, the North Haven School Board, the United Workers, the Yale Medical School, and the local Red Cross. It has worked with the National Council of Defense; it reports to the Children's Bureau, and is in touch with the City Board of Health.

- XII. a. More than 1,000 mothers have received prenatal care, generally for seven months. Only one mother has died; that occurred during the puerperium. Total number of infant deaths, Oct. 1, 1917-Oct. 1, 1918, 46; at birth, 0; during first month, 2; during the first year of life, 44.

The women come under care during the third month.

- b. About half the births in the city are attended by midwives. Percentage of births on our rolls this year, attended by midwives, 12½ per cent.
- c. Age limit of children under care, 6 years; total number under one year cared for, Oct. 1, 1917-Sept. 30, 1918, 1,277; total number between 1 and 5 cared for Oct. 1, 1917-Sept. 30, 1918, 520; total number of infant welfare conferences each week, 5; average number of babies in attendance each week, 225. The majority of children come under care during the first month, many at birth.
- 15 per cent of the babies born in New Haven during 1917 came under our supervision. Our districts cover the town.
- d. Total births in New Haven for years ending Dec. 31, 1917, 5,295; total deaths in New Haven for same period, 441; percentage of deaths under 1 year in 1917, not on our rolls, 93 per cent. There has been no increase in infant mortality during the past year.

(MRS. D. S.) CORA W. SMITH, *Secretary*

DISTRICT OF COLUMBIA

WASHINGTON DIET KITCHEN ASSOCIATION

Washington

I. & II. The Washington Diet Kitchen Association was established 1901, for the feeding of the sick poor. It was incorporated in 1914, and devoted since then to infant welfare work.

III. Problems rendered acute by the war: (a) Loss of doctors from the staff, thereby throwing a very great responsibility on nurses; (b) Finding suitable care-takers for babies whose mothers have gone to work.

IV. Nurses, 8; doctors, 29; all give their services gratuitously. Fourteen of our doctors went into war service.

One of our nurses who went into war service was replaced by a married nurse, whose husband was in the United States Army. We have used nurses' aides or volunteers to weigh the babies or help at the conferences.

V. Because of the increase in the cost of food and living, there has been no noticeable effect in the standard of living, caused by the general advance in wages. Babies are not as well cared for, as many mothers have gone to work and left them with care-takers.

There has been slightly less illness among the babies registered at our conferences, due to intensive infant welfare work.

There has been no noticeable improvement among the colored children due to the advance in wages. The children are neglected, because of the mothers going out to work.

VI. Wages and the Milk Situation. A survey made under the direction of the Children's Bureau has shown that the amount of milk bought for babies and children has decreased.

VII. As a war service the Diet Kitchen Association has assumed the care of all infants and prenatal patients in the families of soldiers and sailors, by co-operating with the Civilian Relief Associations.

About 40 per cent of the mothers reached through our work are engaged in gainful occupations outside of their own homes. This is a decided increase over the number formerly so employed.

VIII. The Association has been co-operating very closely with the Children's Year Committee and took charge of the weighing and measuring in Washington.

IX. Care of the children of pre-school age: Up to July, 1918, we cared for infants up to 2 years, although a great many of pre-school age were supervised. From July, 1918, our work has included children up to 6 years.

X. Total budget for current fiscal year, \$12,000. The organization has been supported by private contributions and membership dues, supplemented by an appropriation made by Congress in July 1918. We ask a fee of from 10 to 25 cents when the patients are able to pay. Mothers whose financial circumstances have been improved by the advance in wages, continue to attend our conferences and ask our advice more than heretofore, because of the general shortage of doctors.

XI. The Association co-operates with all local organizations and with Bureaus or Departments of the Federal Government. All midwife cases are referred to the State Health Departments. Many other cases are reported also, keeping the Association in very close touch with the Health Department.

We have not a Division of Child Hygiene in the Washington Department of Health.

XII. Statistical.

a. Prenatal Care.

162 mothers were cared for during the year. Two deaths were reported, both at childbirth. The average month of pregnancy at which the women came under our care was $5\frac{1}{2}$ or 6. Earliest case was 2 months.

b. Midwives.

The approximate percentage of births in the city, attended by midwives, was 6.8 per cent.

The percentage of babies on our roll whose births were attended by midwives, was approximately 9 to 10 per cent.

c. Postnatal Care.

Age limit of babies or young children under our care was 2 years, until July, 1918.

Total number under one year cared for, 2,021.

Total number of infant welfare conferences each month, 59.

Average number of babies in attendance each month, 1,120.

The average age at which the child was brought under our care was 4-5 months.

Earliest case we had was 4 days.

About 27 per cent of the babies born in our city during the calendar year came under our supervision.

d. Total Births for year ending Dec. 1917, 7,519. Total deaths under 1 year for year ending Dec. 31, 1917, 730.

96.44 per cent of the deaths under 1 year that occurred during the last calendar year in the districts covered by our Association were not on the rolls of our Association.

There has been a slight increase in the death rate among children under 1 year in the last year.

XIII. Recommendations. To offset the neglect of babies by mothers who work outside of the home, we would urge the enactment of state laws, providing for the medical supervision of these babies and making provision for the compensation of mothers for breast feeding and personal care of their own babies.

ESTELLE L. WHEELER, R. N., *Superintendent*

FLORIDA

BUREAU OF EDUCATION AND CHILD WELFARE, STATE BOARD OF HEALTH Jacksonville

This Bureau was established on September 6, 1918, and has as its aim the supervision of all the child welfare work of the state and help in the actual work so far as the personnel permits. In addition to the work outlined for Children's Year, all of which is being done in some sections and part in all, we are trying to evolve a system for physical examination of our school children.

GRACE WHITFORD, M. D., *Chief*

HAWAII

CENTRAL COMMITTEE ON CHILD WELFARE Honolulu

I. & II. The Central Committee on Child Welfare, Mrs. A. L. Andrews, President; Mrs. Wm. McKay, Treasurer; Mrs. F. E. Steere, Secretary, was formed in 1914 and is a centre to which twenty or more church guilds and philanthropic organizations and numerous individual members bring their special pleas for united endeavor.

III. We see little or no effect from the war save in the increased cost of living.

V. As a result of our geographical position the war has depressed business, the government taking away the majority of our coastwise vessels and suspending our tourist travel.

VIII. Children's Year Campaign. Our measuring and weighing clinic was conducted by a Board of Health physician. We sent about 2,000 cards of children under school age to the Children's Bureau, Washington. There are 10,700 children in the public schools so we believe our registration is large.

X. Our expenses are met by annual dues and voluntary subscriptions gained through free newspaper publicity, and special committee work. Our budget for 1917 was approximately \$600. No charge is made for our work.

XII. Prenatal and postnatal work are carried on by the Territorial Board of Health, the District Nursing Association, and the various settlements.

Our committee has investigated and reported on the deaf, dumb and blind. As a direct result the Board of Education has opened a special school for these afflicted ones. We "mothered" a bill in the last Legislature to create a Commission to investigate and report on feeble-mindedness in the Territory. This was the outgrowth of a year's work of a Committee on Mental Hygiene. We have also gained more truant officers and many minor improvements.

CHARLOTTE D. I. STEERE, *Secretary*

ILLINOIS

MOTHERS' AID OF THE LYING-IN HOSPITAL AND DISPENSARY Chicago

The Mothers' Aid of the Chicago Lying-In Hospital was organized in September 1904, and had nine charter members.

Today the membership of 960 women is doing all the sewing and surgical dressing work for the Lying-In Hospital besides helping in volunteer nursing work with the babies. Women have been trained to be nurses' aides in the nurseries and will continue to do this work until the end of the present scarcity of nurses.

We have done the infant welfare work, in the weighing and measuring of children and are doing Social Service work in the districts in which our Dispensaries are located. The more detailed statistical information you ask for, really comes directly through the Hospital and Dispensaries and we are not qualified to report on it.

The money raised by our organization has been expended in building and equipping a Septic Pavilion, in which all cases are cared for which might endanger the health of mothers and babies in our large hospital. This institution is not run by us, but was turned over to the Lying-In Hospital management last January. Each room is a perfect isolation room, having individual sterilizers, toilet facilities, etc., and the total cost of the building and equipment was \$95,000.00.

This year our income has been largely used to help pay the running expenses of the Hospitals and Dispensaries, as the institution has been caring for the wives of our sailors and soldiers, sent by the Red Cross, free of charge. This has largely increased our number of free cases, as the usual number of Dispensary cases must be cared for in the Hospital.

MRS. HUGO HARTMANN, *President*

INDIANA

THE CHILDREN'S AID ASSOCIATION

Indianapolis

It is not clearly evident that the war has had very great direct effect upon the infant welfare work done by this Association. So far as our work, which is a general child welfare work, touches the problems in which the "American Association for Study and Prevention of Infant Mortality" is chiefly interested, it is through our milk station baby clinics and through the babies' summer hospital.

Of these clinics we have ten, having added two this last summer. These operate during the entire year and are held once each week. In connection with them a war problem has arisen in that five of our doctors have gone into army service and three nurses to the Red Cross. But though with difficulty new nurses were secured and though because of increased duties in other directions, our doctors, being volunteers, could not be called upon for increased work with us, the situation has not greatly hampered us. The shortage of doctors led us to decide to hold each clinic but once in two weeks, asking each doctor to take two clinics, thus not increasing his work, but keeping all the clinics active with a nurse assigned to visit constantly in each district.

Our plan is to have the nurses follow birth returns in their several districts, also to follow up the cases discharged from the city hospital and other hospitals. We have recently arranged to have such discharges immediately reported to us by the hospitals. We are now urging the Board of Health to permit us to deliver the certificates of birth, very attractive and much coveted when understood by the parents. These certificates have been expected to act as a check upon the birth returns made by physicians. We have felt that to deliver them through our nurses would do much to insure their receipt and intelligent acceptance by the parent and would also furnish a good reason for the nurse's approach to the family. If it is not granted to us to make the delivery of the certificate, we are to be furnished with cards describing the certificate and inquiring as to whether or not it has been received. This, in a measure, will serve our purpose.

We are not able, with much conviction, to relate conditions of health to the war conditions. It has seemed that the morbidity among babies has not been abnormal. Out of nearly one thousand infants, supervised by our nurses during August, but four died, during that hot month. Out of 1,433 carried in nine months of 1918, but eleven have died. The average monthly expense of supervision per child has been a little less than fifty cents.

Our small babies' hospital, with a capacity of twenty, open during the summer months, cared for sixty-five sick babies with a loss of but five. This building is in charge of a trained nurse with two practical nurses as helpers.

The amount of milk purchased by the families with which this Association has dealt has apparently not greatly changed during this last year. The amount purchased and given by the Association has slightly increased, but a larger number of cases is under supervision. Any tendency on the part of parents, as a result of higher wages, to purchase more milk has probably been offset by increase in the price of milk which the milk dealers frankly admit tends to reduce sales.

The County Council of Defense made the survey of child life between two and six years. The results of this registration and examination are at the disposal of the Children's Aid Association and two nurses have been added to the staff to make possible the follow-up work needed. Provision has also been made at county expense for a nurse, under Children's Aid Association supervision, to do the follow-up work in portions of the county outside the city limits. She will also extend her interest to include infant welfare work. The appropriation will not permit this work to begin until January 1st.

The Association emphasizes its infant welfare work and has had the co-operation of the Board of Health in its efforts. A grant of five thousand dollars per year has been made by the city for the furtherance of this work and an agreement exists with a leading milk distributor whereby registrants at the baby clinics may have reduced rates for milk. The Association also pays part of the price in some cases and in the very needy cases, pays full price, having the milk delivered free to the baby's mother.

PAUL L. KIRBY, *General Secretary*

THE BABIES' MILK FUND ASSOCIATION Evansville

I. & II. The Babies Milk Fund Association was organized in 1912 and became incorporated under the State laws of Indiana in 1915.

IV. Under normal conditions we have five doctors on our medical staff, all giving their services free of charge. Under normal conditions we employ three nurses.

All our nurses are Red Cross nurses and have asked for chevrons for the infant welfare work except one, who is on duty in one of the camps. We have employed another nurse in her place.

We have used no nurses' aides or volunteers in our work up to this time.

Five of our medical staff have gone into war service. We have replaced them with older doctors.

V. The effect of better wages upon health, living conditions and welfare of the babies is generally improved.

Until the present epidemic there had been a decrease in sickness. There does not seem to be any noticeable change in the colored element of the city by the improvement in wages.

We have no foreign mothers attending clinics.

V. We have had a remarkable increase in our milk sales.

VII. Outside of our clinics held twice a week and the nurses carrying out the doctor's instructions in the homes, we have made no other advances as a war measure for this work covers as much as we can take care of. The city nurses attend to the older charity cases as our work is more especially for children under five years of age.

About one-third of our mothers are engaged in gainful occupations. This is an increase over normal conditions.

We give the nursing care and instructive care. The city conducts two day nurseries.

The Association carried on its own weighing and measuring at the clinics and also the follow-up work. The Association also supervised the weighing and measuring in the schools for the Child Welfare Committee.

IX. We give children of pre-school age, nursing and instructive care.

X. Our total budget for the current fiscal year ran close to \$5,000.00. Our Association is supported by an annual donation of \$1,800.00 from the city, but mainly by contributions from the public, solicited once each year by the members of the Association. We usually solicit this fund during the annual baby week and carry on extensive newspaper advertising. This year we did away with all publicity and solicited very quietly as so many other campaigns were in the field. We found it to be the best way for this year. If the same conditions are existing next year we will adopt the same system, for we realized more money than in any previous year with less work. By putting all members on the soliciting committees we did not have to appoint publicity committees and all our members were free to work.

All the work done by our Association is free to the poor and those whose financial circumstances can afford it are asked a very nominal sum. Fifty cents per hour is the charge whenever one is made.

Our clinics are not so well attended just now, as so many of our mothers are employed, but the number of calls on our nurses is much greater.

Whenever we make a charge for services it is always paid and the work seems to be more appreciated.

XI. We are the only organization in the city giving instructive and nursing care and supplying milk free to charity cases. We co-operate with the Children's Bureau of Washington. A great deal of the literature we distribute to our mothers comes from that Bureau.

XII. a. We had about fourteen mothers in our care during the past year. They were under our care about four or five months. We had no deaths during pregnancy, at childbirth or during puerperium.

We had no loss of infants at birth; one during the first month of life and two during the first year of life.

Women usually come to the clinics during the fourth or fifth month of pregnancy for advice; the earliest case being at two months.

b. The percentage of midwives attending births in the city is very low. This Association has had two this year.

c. The age limit of children is six years.

The total number cared for, close to 1,200.

The total number between one and five years, about 500.

We hold two weekly conferences each week, one in the west end of the city and one in the north end.

We have an average attendance each week of 40 to 65 patients.

Our cases start at birth and average up to eight and nine months. Most cases start in at birth. In some families we have raised two and three children. About one-half of the births during the year have come under our supervision.

- d. Total births for year ending December 31, 1917, 1,505.

Total number of deaths under one year for year ending December 31, 1917, 186.

Only eighteen of total deaths in city were on our rolls.

There has been a decrease in death rate in our care and a decrease in the number of city deaths.

XIII. During June, July and August of 1917 the Babies Milk Fund Association conducted an Open-Air Hospital in one of the parks on the outskirts of the city. The feeding, stomach and bowel disorder cases were removed here and were cared for under the supervision of our head nurse and medical staff. Out of the total number of thirty-four patients there were eleven deaths. As this was the first experiment of this kind for the city, the majority of these cases were received in the very last stages when life was almost gone, and we were the last resort. All these cases were cared for under one tent. We of course had to enlarge our nursing staff for hospital and city work. This year, the summer, just closed, the hospital was enlarged to one main tent, one isolation tent and one general purpose tent, the latter used mainly for cooking and the preparation of milk and medicines.

The total number of patients were twenty-five and the deaths five, showing a marked percentage in decrease over last year.

Mrs. CURTIS MUSHLITZ, *Secretary*

KENTUCKY

BABY MILK SUPPLY FUND ASSOCIATION

Lexington

Organized 1914.

III. Our most difficult problem rendered acute by the war, has been to secure milk for the babies.

IV. Staff: 2 doctors and 1 nurse. Doctors gave their services free. Three of our medical staff went into war service.

V. The advance in wages has made no difference in the living conditions of the families reached by our Association, as the cost of living advanced with the wages.

Our babies are all American, white or colored.

VI. Amount of milk purchased was about the same, but the price has increased. We have educated our people to try to pay at least one-quarter of the price of the milk. In 1914 it was given free of charge.

VII. About one-third of the mothers are employed outside of the homes. War conditions have made no difference. We make no provision for the care of mothers thus employed. The colored mothers usually send their children to the Day Nursery if they are near enough to it.

VIII. We co-operated in the Children's Year Campaign, especially in the weighing and measuring activities and plan to do follow-up work.

IX. We have the children under our care from birth until they are 2 years old.

X. Our Association is supported by an appropriation of \$1,200 per annum from the city, membership dues and special contributions. We ask the mothers to pay a fee for the milk when possible.

XI. We have no Division of Child Hygiene in our city, but we have one in the state.

XII. Prenatal Care. The Public Health Nursing Association takes charge of prenatal cases.

Postnatal Care. Age limit of babies or young children under care, 2 years.

Total number under 1 year cared for, 80.

Total number between 1 and 5 years cared for, 57.

Total number of infant welfare conferences each week, 1.
 Average number of babies in attendance each week, 10.
 The child is usually over two months old before it is brought under our care, but sometimes we have had them as early as three weeks.
 Five babies under one year cared for by us died.
 Total births in our city for year ending Dec. 31, 1917, 664.
 Total deaths under 1 year for year ending Dec. 31, 1917, 77.

MARGARET LYNCH, R. N., Nurse

BABIES' MILK FUND ASSOCIATION **Louisville**

The Association was organized in 1908.

III. Problems in infant and maternal welfare work rendered acute by the war: (1) Increase in work, due to rapid growth in population and to Children's Year publicity; (2) insufficient nursing staff; (3) scarcity of doctors. As a result of war conditions it has been necessary to increase area of nursing districts; to increase the average number of patients under care of each nurse.

IV. Staff: Under normal conditions staff consists of eight nurses and seven doctors, all of whom gave their services without charge. Two nurses have gone into war service and have been replaced by Home Defense nurses. No nurses' aides or volunteers have been used. Three of medical staff have gone into war service.

V. Effect of general advance in wages upon standards of living, upon health and general welfare of mothers and babies. The cost of living has kept step with the advance in wages, consequently we do not find that the wage advance has made any material difference in the standards of living of the families with which our organization is in touch.

Advance in wages has had no effect upon the health and general welfare of the babies.

Illness among the babies has been on the increase.

Nor do we find there has been less illness among the older children.

The advance in wages has had no effect upon the care given by the colored mothers to their infants and young children.

The same may be said relative to mothers of foreign birth.

VI. Wages and the milk situation: Daily amount per child reduced as cost of milk advanced; total number of children given milk increased with the publicity on value of milk as food for children.

VII. War Service: Close co-operation with the American Red Cross Civilian Relief in supervising the health and welfare of soldiers' infants and young children; prenatal care and instruction to expectant mothers.

Approximately thirty-three of the mothers reached by the Milk Fund are engaged in gainful occupations outside of their own homes.

The percentage of mothers so engaged to the total cared for is 3 per cent. This is probably a normal figure, but there has been a marked increase in the number employed at "Government shirt-making." This home employment has had a conspicuous effect, in many instances lowering the standard of living and tending to neglect of child.

The Milk Fund has done what it could to obviate the necessity for such labor by referring cases to relief agencies.

VIII. Children's Year Campaign. The Milk Fund Board of Directors and Nursing Staff have been very closely identified with the Council of National Defense in planning and executing the Children's Year program.

The Milk Fund has undertaken follow-up work in connection with the examinations of babies and children after the Children's Bureau plan.

IX. Care of children of pre-school age: Under direct supervision of the Milk Fund from infancy to five years of age.

X. Financial: Total budget for the current fiscal year, \$13,000.

The organization is supported by city and county appropriations and by voluntary contributions.

Method of raising funds: By affiliation with the Louisville Federation of Social Agencies.

No funds whatever are raised in connection with the newspapers.

All work done by the Milk Fund is free of charge. In many instances mothers, whose financial circumstances have been improved, continue to attend the conferences and to ask for advice.

XI. Affiliations: Co-operation with other local organizations through the Louisville Federation of Social Agencies; American Association for Study and Prevention of Infant Mortality, and with the city and state Departments of Health.

There is no division of child hygiene in county or state.

XII. Statistical.

a. Prenatal Care.

Total number of mothers cared for during year, 161.

Average number of months under care, 6.

Total deaths of mothers, 0.

Total number of infant deaths, 3 (colored).

At birth, 3 (premature).

The month of pregnancy women come under care.

Average cases, 4th month.

Earliest case, 2nd month.

b. Midwives.

Unable to secure city statistics relative to midwives.

c. Postnatal Care.

Age limit of babies or young children under care, 5 years.

Total number under one year cared for, 1,029.

Total number between one and five years cared for, 871.

Total number of infant welfare conferences each week, 5-4.

per week is the average. Average number of babies in attendance each week, 89.

The child's life is brought under care of Milk Fund—

Average cases, 6 weeks to 4 months.

Earliest case, 2 weeks.

The percentage of the babies born in Louisville during the first six months of the calendar year, who came under the supervision of the Milk Fund, 16 per cent.

The percentage of the babies born in Louisville during the last calendar year, who came under the supervision of the Milk Fund, 12.1 per cent.

XIII. Health Department attributes increase to growth of population.

Means of combating increase: Extensive and intensive educational campaign in homes and in public schools. C. MARGUERITE LANGLEY, R. N., Supervisor

MAINE

BABY HYGIENE AND CHILD WELFARE ASSOCIATION

Portland

Office of the Board of Health

This station was opened May 14, 1918, and September 30, 1918, had enrolled 367 babies. Number of deaths, 8; of this number 4 were syphilitic. We enroll children up to two years of age. We have four clinics a week, Tuesday, Wednesday, Friday and Saturday, from 11.30 A. M. to 1 P. M., and average thirty babies.

We modify and pasteurize in the station a daily average of sixty formulae. The City Bacteriologist tests the milk once a month or so before pasteurization.

Last year we paid eight cents a quart for milk and gave it to our babies for nine cents, modified and pasteurized, and paid our own milk bill. Since June 1918, we have been paying ten cents per quart and we sell it for the same price.

We have two doctors who volunteer their services, two trained nurses who are also graduates of the Instructive District Nursing Association, Boston, Mass. The nurse in charge receives \$1,000 per year, and the assistant nurse receives \$900.

The city last year appropriated \$1,000 toward our Association and this year, beginning January 1, 1918, they raised the appropriation to \$2,000. We have our rent and gas free. Two volunteers come each day to help give out the milk. The balance of funds is raised by private subscription.

In June we held a very successful "Baby Week," the first of the kind ever held in Portland.

Our nurses visit the homes of the babies in the afternoon and give instructions to mothers about care of older children as well as babies, also give verbal instruction and literature to prenatal cases and a prenatal clinic at a free dispensary is conducted here in the city.

The past summer, a dental clinic for children has been opened in Portland and our Association contributed \$50.00 to this worthy cause. We have the privilege of sending children and have sent thirty-four during the summer and fall.

At our Wednesday clinic, we vaccinate children free. The city pays us 25 cents apiece for this. The past year we have vaccinated 434.

We affiliate with the Associated Charities, Children's Protective Society, City Hospital, Civilian Relief of the Red Cross, Board of Health, and dental clinic of the Children's Hospital.

The amount of milk purchased, for babies the past year, has generally increased, and our families have improved materially. Mothers have received better maternal care, etc., as wages in Portland have increased.

At our last meeting, held in November, it was voted to change the name from Portland Milk and Baby Hygiene Station to Baby Hygiene and Child Welfare Association.

Total number of births in our city in 1917, 1404.

Number died at birth, 53.

During first month, 59.

During first year of life, 117.

Death rate among babies in Portland in 1917, the lowest on record.

KATHERINE L. QUINN, R. N.

MARYLAND

BABY WELFARE SECTION OF THE CIVIC CLUB

Cumberland

We have found that war work has lessened the calls for milk as so many of the mothers are working in war work. Our funds are raised by the Civic Club, of which we are a section.

MRS. B. A. STINNER, *Chairman*

MASSACHUSETTS

BABY HYGIENE ASSOCIATION

Boston

Organized May 1909.

III. The increase in numbers supervised for the year ending September 30, 1918, was 26 per cent over the preceding year. For the year ending September 30, 1917, the increase was 8 per cent over the preceding year. Our chief problem during the past year has been to maintain our standard of supervision in proportion to our rapid growth. During the past year two stations for the supervision of well children from one to five years have been opened and two more authorized, which will be opened within a month. On September 1, 1918, our period of supervision in the infant welfare stations was extended from the first year to include the first two years of life. As a result of this change, supervision in the child welfare stations will now extend from two to five years.

IV. Our staff consists of 16 physicians and 21 nurses. All these physicians give their services without charge. Three nurses and 4 physicians have gone into war service. Up to the present we have had no difficulty in replacing nurses but are beginning to find it difficult to replace physicians.

V. In regard to the effect of the general advance in wages upon standards of living, upon health and the general welfare to mothers and babies, I can give no accurate information. Although many of our families receive an income in excess of what they have ever received before, my impression is that a large part of this is spent on non-essentials and that the general standard of living has not improved. The advance in wages seems to have no effect upon the health and general welfare of the babies and there has not been less illness.

VI. The amount of milk bought for babies and children has increased.

VII. Very few of the mothers reached by our Association are engaged in gainful occupations outside their homes. These who are thus engaged are mostly Italian women who make up about one-quarter of our registration. Of these women probably a maximum of 10 per cent are engaged in occupation outside their homes. For the others this is probably under 3 per cent. This is probably a slight increase over the normal for the Italians but not for other nationalities.

VIII. The Association co-operated with local organizations in the weighing and measuring campaign, over one-fourth of all the babies weighed in Boston being weighed in our stations.

IX. See No. III.

X. Total budget for the year ending September 30, 1918, \$30,436.94. The Association is entirely supported by private contributions together with a small endowment fund. No appropriation is received from city or state. All our services are given free of charge. We find that mothers whose financial circumstances have been improved by the advance in wages still continue to seek our advice.

XII. c. The age limit of babies in the infant welfare stations is two years; in child welfare stations, five years. The total number of infants under our care for the year ending September 30, 1918, was 6,472; of children between the ages of one and five years, 135; the total number of infant welfare conferences each week was 21; average attendance, 36.

Cases rarely come under our care before they are three weeks old. Half the babies under our care were admitted before they were two months old. One-third of all the babies in Boston are cared for by the Association.

The total births in Boston for the year ending December 31, 1917, was 19,856; the total number of deaths during the same period among children less than one year of age was 1,965.

J. HERBERT YOUNG, M. D., *Director*

THE PRENATAL AND OBSTETRICAL CLINIC OF THE WOMEN'S MUNICIPAL LEAGUE

Boston

The Clinic was reopened on August 22, 1917, on an entirely self-supporting basis. By a calculation of expenses and of the number of cases which could be handled by one nurse the committee made up its mind that a fee of \$25 per case would cover the expenses, provided the nurse's time was thoroughly filled. This "consummation," however "devoutly to be wished" is, of course, unattainable until the Clinic can make itself appreciated in the community, and that is always a matter of considerable time; therefore, this report continues to be one of an experiment still in process. Should it be found as the patients increase in numbers that \$25 does not cover the expenses, the fee will be increased to \$30, but the chairman of the committee is loath to do this until, by careful calculation, it is found necessary. The expenses of a clinic carried on on a small scale are necessarily, in this line of work, higher than they would be were more nurses employed, for confinements have an inconvenient way of coming simultaneously, and the charge for covering the actual period of childbirth by a nurse hired for the occasion is much higher than it would be were she regularly employed by the Clinic. It seems, therefore, hardly fair to count this extra cost during the experiment, when it will cease to exist after the experiment has proved its value and can be established on a commercial basis. This report will, therefore, not cover the expenses of the Clinic, but simply the results achieved.

During the year from August 22, 1917, to August 21, 1918, the total number of applicants was 89.

Number of cases cared for during pregnancy, labor and the puerperium.....	35
Number of cases receiving prenatal care only.....	3
Number of cases not delivered at expiration of year, Aug. 21, 1918.....	5
Number of cases delivered in hospital.....	11
Number of cases delivered at home by private physician.....	8
Number of cases delivered at home by doctor from Lying-in Branch.....	2
	21
Number of cases coming for determination of pregnancy.....	4
Number of cases that moved leaving no address, or have not been heard from	10
Number of cases living so far out of district that no care was attempted....	11
	25
	89

Clinic Record

Number of Clinics held from Aug. 22, 1917, to Aug. 21, 1918, both inclusive.... 53

Visits to Clinic

Number of visits by patients carried through confinement.....	84
Number of visits by patients not delivered Aug. 21, 1918.....	11
Number of visits by patients receiving prenatal care only.....	7
Number of visits by patients not remaining under the care of Clinic.....	77

Total number of visits to Clinic.....179

Average number of visits to Clinic per day, 3.3.

Home Visits to Patients

By Doctor—Postnatal—Average number per case, 2 to 4, according to condition of patient.

By Nurse—Prenatal—Number of visits made to patients cared for during pregnancy and labor

Number of visits to patients receiving prenatal care only

Number of visits to patients during year who were delivered after expiration of year.....

Number of visits to patients not continuing treatment..

Total number prenatal visits.....511

Average number of prenatal visits per patient cared for during pregnancy and labor, 9.3.
 By Nurse—Postnatal—Total number of postnatal visits.....512
 Average number postnatal visits per case, 14.6.

Record of Mothers Cared for During Pregnancy, Labor and the Puerperium

Number of cases from August 22, 1917, to August 21, 1918..... 35

Deliveries:

Normal	26
Forceps (3 mid-forceps, 4 low forceps)	7
Internal version	1
Miscarriage (macerated foetus from uraemic poisoning—chronic nephritis—at 4½ months, mother one month under care of Clinic well-developed uraemic condition when admitted.....)	1
	<hr/> 35

Deaths, maternal none
 Average length of time during which prenatal care was received.... 2.87 months
 Prenatal visits to Clinic—each patient is required to make two.
 Average number of prenatal visits by nurse per patient..... 9.3
 Average number of postnatal visits to doctor—2 to 4 according to patient's condition.
 Average number of postnatal visits by nurse, per patient..... 14.6

Complications:

Albumen	5 cases
Eclampsia	none
Threatened eclampsia	1 case
Slight tubo-ovarian infection	1 case
(Developed 2 weeks after confinement, running a few days. This patient also had a second-degree tear and was in bed 3 weeks; good recovery)	
Syphilis	1 case
(Patient had syphilitic history—Wasserman test during latter part of pregnancy, negative)	
Post-partum hemorrhage	none
Breast infection	none

Condition at discharge:

All patients, except the one referred to above as having slight tubo-ovarian infection, were discharged between the 12th and 16th days, up and in good condition.

Condition at end of 6 weeks:

With few exceptions all patients returned to Clinic for final examination and were found to be in good condition with the exception of those having old lacerations of cervix and perineum from previous confinements.

Number of Pregnancy:

1st pregnancy.....	12 cases
2nd pregnancy.....	12 cases
3rd pregnancy.....	1 case
4th pregnancy.....	2 cases
5th pregnancy.....	3 cases
6th pregnancy.....	1 case
7th pregnancy.....	1 case
8th pregnancy.....	2 cases
16th pregnancy.....	1 case

Age of Mothers:

Oldest mother.....	44 years of age
Youngest mother.....	19 years of age
Average age of mothers...	29 years

Birthplace of Mothers:

United States.....	21 cases
Canada	7 cases
England	2 cases
Ireland	1 case
Russia	2 cases
Sweden	1 case
Germany	1 case

Occupation of Fathers:

Tradesmen	18
Musician	1
Chef, Walter, Gardener, Janitor	4
Navy Yard	2
Railroad Men, Motormen, Car Conductor, Expressman	5
Ashman, Freight Heaver	2
Shipping Clerk	1
Telephone Inspector	1
Unknown—father died before birth of baby	1

Home Conditions:

Good	23 cases
Fair	7 cases
Poor	4 cases
Very poor	1 case

Record of Babies Born of Mothers Cared for During Pregnancy, Labor and the Puerperium

Number of babies born	34
Weight of largest full-term baby—11 lbs. (male)	
Weight of smallest full-term baby—6 lbs. (female)	
Average birth-weight (including 2 premature births)—7 lbs. 14 oz.	
Premature births	2
(Both were 8-month babies. (1) one of them died on the 2nd day, of pneumonia and prematurity; mother had received prenatal care for only 2 weeks. (2) The other baby died in 1½ hours, of congenital cardiac lesion. Mother had received prenatal care for 5 months)	
Stillbirths	none
Breast-fed	all
Eye infections	none
Cord infections	none
Complications:	
1 baby born with extra thumb, amputation on 10th day, excellent result.	
1 baby circumcised on 8th day—phimosis with retention of urine.	
Sex:	
Female	15
Male	19
Patients receiving Prenatal Care only	3
(1 patient moved to Chicago, after receiving Prenatal Care for 3 months.	
1 patient moved out of district covered by Clinic after receiving Prenatal Care for 4 months; and retained obstetrician of Clinic as private physician; delivery was normal; both mother and child were discharged in good condition.	
1 patient on advice of consulting physician and obstetrician of Clinic chose Caesarean section, and retained the latter as private physician; both mother and child were discharged in good condition; baby bottle-fed.)	

Cases Not Remaining Under Care of Clinic

Delivered at Hospitals	11 cases
Delivery:	
Normal	10
Caesarean section	1
Mothers discharged in good condition:	
3 received prenatal care for short time	
1 received prenatal care for 5 months	
7, unknown whether these 7 cases received prenatal care or not.	
Babies:	
Stillborn	1
Died 2nd day	1
Discharged sick, died before 1 month old	1
Reported well and normal when discharged	8
Delivered at Home by Private Physician	8
Delivery:	
Normal	6
Miscarriage	1
Forceps	1
Mothers living; unable to ascertain exact condition.	

Babies:	
Stillborn	1
Normal	6
Delivered at Home by Doctor from Lying-in Branch	2
Delivery:	
Normal	2 ..
Mothers:	
In good condition	2
Babies:	
Normal	2
Determination of Pregnancy	4
1 miscarried within a week after visit to Clinic (probably self-induced abortion).	
1 miscarriage—on examination doctor very doubtful of pregnancy, advised patient to return in one month, but in the meantime patient miscarried.	
1 not pregnant.	
1 moved without leaving address.	
Moved, leaving no address, or have not been heard from	10
Living so far out of district that no care was attempted	11
(The 46 cases described in this table received 93 prenatal visits from the Clinic nurse, which were not paid for. This was before charge for prenatal care was instituted. Charge for prenatal care alone is \$5.00.)	

MRS. WILLIAM LOWELL PUTNAM, *Chairman*

MASSACHUSETTS SOCIETY FOR THE PREVENTION OF CRUELTY TO CHILDREN

Boston

This Society has been in existence now about forty years. Its purposes have been the protection of all children, including infants, from the beginning.

In the course of the year throughout the state, we have influenced the lives of about 12,500 children in about 5,000 families, and protected them from cruelty and various forms of neglect. In many instances doctors, hospitals or dispensaries refer to us problems that involve very directly the lives of infants, especially where they are actually deprived of the food they need.

We have the full-time service of a woman physician but we have no nurses in our employ.

We are in no position to give accurate information as to the effect of the general advance in wages upon the standards of living, but we notice that milk is one of the kinds of food which is quickly cut down when prices go up.

Our affiliations with other organizations are so close that any organization that finds its plans seriously interfered with in the protection of children turns to us for the more definite disciplinary service needed.

C. C. CARSTENS, *General Secretary*

STATE DEPARTMENT OF HEALTH

Boston

Outline of Department's Child Welfare Work, 1917-1918

The chief activities of this Department last year along the line of child conservation were directed toward a survey of the cities and towns of Massachusetts with a view to determining their facilities for child welfare work. This survey was made through the Child Conservation Committee appointed by Commissioner McLaughlin in the summer of 1917. This Committee consisted of certain members from the Department itself and certain others—experts in the various branches of child welfare endeavor—from outside the Department. Funds were obtained from the local chapter of the Red Cross to pay the salaries and from the Legislature to pay the expenses of eight public health

nurses who made the surveys, one nurse being assigned to each of the health districts of the state. Careful consideration was given the surveys thus obtained and suitable recommendations made to the cities and towns concerned.

In addition to the above activities the Department has maintained a health exhibit in charge of two public health nurses. Health weeks were held in various parts of the state and many lectures were given on the subject of child conservation.

We utilize the newspapers as far as practicable to get the public to write us for information on matters affecting the health of the child. Personal letters and pamphlets of various kinds are largely relied upon. Our Prenatal Letters sent to expectant mothers on request from family physicians, clinics, or other persons interested, have proved to be very valuable indeed. We are planning now a series of Postnatal Letters as well.

MERRILL CHAMPION, M. D., *Director, Division of Hygiene*

AVON HOME

Cambridge

We have been unusually successful this year in making plans for many children to remain with their parents or proper relatives under supervision instead of taking them out of their own families and placing them in our boarding homes. This plan often means much more work and exacting care, but we believe it to be better for the morale of the entire family, when it can be successfully accomplished. During year ending November 1, 1918, we have cared for 417 children in our boarding homes, 184 of whom were Avon Home children and 233 were the children whom we were able to place for the Country Week Committee.

We have been thankful not to have had one case of influenza in all our many boarding homes. This seems the more surprising as our homes are in twenty-five cities and towns, many of which had a great number of cases.

The Cambridge children who suffered from infantile paralysis two years ago and whom by the kindness of Cambridge friends who have loaned their automobiles for this work we have been able to take to the clinics twice a week for treatment, are showing fine results. Many of these children are now able to walk, some are ready for apparatus which will help them to grow strong and straight.

STATISTICAL REPORT

Number of children admitted to care of The Avon Home from Nov. 1, 1917 to Nov. 1, 1918	75
Number of children readmitted to care of The Avon Home from Nov. 1, 1917 to Nov. 1, 1918.....	19
Total number of admissions during the year.....	94
Number of Children:	
In care of The Avon Home, Nov. 1, 1918.....	97
In Avon Home boarding homes.....	75
In free homes	2
In wage-earning homes.....	2
For whom board is paid in own homes.....	3
On trial for adoption	1
Under observation at Mass. Hospital School.....	3
Under observation at Mass. School for Feeble Minded.....	3
Under observation at Monson State Hospital.....	2
In Wrentham Feeble Minded School.....	2
Under observation at Orchard Home School.....	1
Under observation at Wellesley Convalescent Home.....	1
In training at Robert Breck Brigham Hospital.....	1
Mothers placed as wet nurse with baby.....	2
	97

Number of children in care of The Avon Home, Nov. 1, 1917.....	90
Number of children admitted to the care of The Avon Home from Nov. 1, 1917 to Nov. 1, 1918	94
Total number of children in care of The Avon Home during year.....	184
Number of children discharged from care of The Avon Home during year....	84
Number of babies cared for at Infants' Hospital during year.....	2
Number of infantile paralysis children looked after and taken to Hospital clinics for regular treatment	70
Number of families for whom application was made from Nov. 1, 1917 to Nov. 1, 1918	289
Number of children for whom application was made from Nov. 1, 1917 to Nov. 1, 1918	436
Number of families from whom children were admitted to care of The Avon Home during year	69
Number of families advised and planned with during year.....	147
Number of families referred to other societies during year.....	49
Number of applications withdrawn during year.....	14
Number of applications pending	10
Number of families on follow-up list Nov. 1, 1917.....	114
Number of families added to follow-up list during year.....	50
Number of families discharged from follow-up list during year.....	16
Number of families on follow-up list Nov. 1, 1918.....	148
Total number of children on follow-up list Nov. 1, 1918.....	420
Under two years of age.....	31
Between two and fifteen years of age.....	297
Over fifteen years of age	92
Number of boys	190
Number of girls.....	230
Number of children discharged during the year and not supervised.....	420
Total number of follow-up visits made during year.....	50
Number of mothers and babies for whom convalescence has been provided during year:	550
In Avon Home boarding homes.....	3
In Milton Convalescent Home.....	7
Number of girls over 14 years old for whom work has been secured during year	12
Number of boys over 14 years old for whom work has been secured.....	16
Number of women for whom work has been provided during year.....	30
Number of men for whom work has been provided during year.....	6

EMMA O. STANNARD, *General Secretary*

INFANT HYGIENE ASSOCIATION

Holyoke

Statement of the Work of the Municipal Milk Station

Organized, April, 1911. Incorporated, February, 1914.

Results count. How many babies' lives have been saved since 1911? By actual count an average of 52 each year. A total of 314 up to November, 1917.

How do we know? The average number of deaths of babies under one year of age (excluding the deaths of babies at the Brightside Institution, who were born outside of Holyoke), was for the years 1909 to 1911 inclusive, 144 per 1,000 births.

Since 1911 the number of such deaths has fallen rapidly and for the past 4 years has remained at approximately the same level, namely, 109 per 1,000 births.

Another result: Our nurses made nearly 4,000 visits to the homes of these babies during the past year. At these visits the mothers received instruction on the care of their babies.

STATISTICS

	City appro- priation	Daily aver. No. of babies	Total No. babies in year	Babies brought to clinics	Nurses visits	Quarts of milk	Pre- natal visits	Cost per child to city
1911		17	78	...	...	...	..	....
1912		59	234	...	...	...	..	....
1913		79	309	...	...	...	..	....
1914	\$3,000	93	343	...	784	40,489	..	\$14.00
1915	\$3,000	96	351	479	1,584	38,722	29	....
1916	\$3,750	99	364	487	2,232	35,977	60	\$10.20
1917	\$3,750	168	463	1,101	3,223	59,731	106	\$ 8.10
1918	\$3,750	244	588	1,470	3,840	78,908	143	\$12.09

The past year has been unprecedented in the demands made on us, and in the number of babies cared for. The frequent raises in the price of milk and of all the materials entering into the preparation of the modified milk, and the cost of maintaining our plant have made this large deficit inevitable.

The only factors in the Milk Station's favor are the faithful and efficient work of our underpaid but overworked nurses, and the nominal rent we pay for quarters, which are, however, overcrowded and insufficiently equipped.

URGENT NEEDS

1. An appropriation large enough to cover all expenses not covered by the milk sales.
2. Salaries that shall recompense our nurses for their labor and sacrifice.
3. Well built and sanitary quarters with up-to-date equipment.
4. The salary of a full-time prenatal nurse, as prenatal work alone offers the best hope of still further reduction of our infant mortality.

F. H. ALLEN, M. D., *Director*
MRS. SUMNER H. WHITTEN, *President*

MICHIGAN

THE BABIES MILK FUND

Detroit

I. & II. The Babies Milk Fund was organized in 1909 and became an auxiliary of the Visiting Nurse Association in 1916.

Originally the Fund, as the name indicates, was a dispenser of milk only, but enthusiastic supporters of the organization soon realized the need of expansion and in 1911 reorganized to include a nursing service.

IV. The staff is composed of a supervisor and 6 other nurses, two of whom act as head nurses to give stability to the staff as the other four selected from the Visiting Nurse Association rotate upon the staff of the Babies Milk Fund for a period of six months each.

There are 3 doctors besides the Medical Director, all of whom give their services without charge. Four of our nurses went into war service. They were replaced by nurses from the Visiting Nurse Staff. Three of our doctors, including the Medical Director, went into war service. Women physicians for clinics took their places.

V. There has been a marked advance in the standards of living of the families with which our organization has been in touch, as a result of the general advance in wages, and also an improvement in the health and general welfare of the babies. There has been less illness, especially among the Jewish babies. There has also been less illness among the older children. As a result

of the advance in wages, there has been an improvement in the care given by the Russian and Polish mothers to their infants, especially the children of those employed by the Ford Company.

VI. There has been an increase in the amount of milk bought for babies.

X. Total budget for the current year, \$10,000.

Our organization is supported by the public, through the Budget Committee Community Union.

The work is given free of charge; when possible, a fee of ten cents is paid for medicine.

The mothers whose financial circumstances have been improved by the advance in wages continue to attend our conferences and ask our advice.

XI. In Detroit it is the plan of the Visiting Nurse Association and the Babies Milk Fund to do the pioneer work and supplement the Department of Health. The Babies Milk Fund has selected three congested districts where infant mortality was high, two within the confines of Detroit the other in a district although topographically and geographically a part of Detroit still retains its own village administration. In each district a clinic is maintained. The Jewish clinic has been established the longest. In this district the problem is practically a medical one. At the Franklin Street Settlement where the population represents largely our Italian and Syrian members the problem was largely solved through proper diet. In order to convince the mothers that raw meat and coarse vegetables, an old-country diet, did not meet the needs of this climate, cereals were purchased at wholesale rates and sold to the mothers at cost. Through the co-operation of the Visiting Housekeeper the principles of household cookery were taught. In one year the mortality rate dropped from 34 per cent to 11 per cent.

In Hamtramck, where the population is about 90 per cent Polish, the problem is more complex, for it presents medical and social problems and a stolid race difficult to instruct. In this village the nurses succeeded in lowering the death rate about 3 per cent.

XII. Prenatal work is being emphasized more and more, and through the close co-operation with the Visiting Nurse Association an effective plan has been arranged whereby nurses who are especially qualified for this department have undertaken this important educational feature. Although Detroit is not yet well provided with prenatal and maternity clinics, the instruction in the home is proving itself to be of value.

Postnatal Care:

In the restricted districts in which we work, the Visiting Nurse Association turns the babies over as soon as the mother is dismissed from their care.

Total number under one year cared for, 5,892 (dispensary); 1,175 (non-dispensary).

Total number between 1 and 5 years cared for, 2,500.

Total number of infant welfare conferences each week, 10.

Average number of babies in attendance each week, 80.

Total births for year ending Dec. 31, 1917, 26,270.

Total deaths under 1 year for the year ending Dec. 31, 1917, 2,722.

As this report shows, the policy of the Fund is an intensive rather than an extensive one.

LIZETTE DRISCOLL, *Executive Secretary*

CLINIC FOR INFANT FEEDING Grand Rapids

Organized 1911.

III. Our most difficult problem during the past year was the shortage of physicians and nurses.

As a result of war conditions we have found it necessary to use paid lay workers as clinic attendants, to put up formulæ in homes and to follow up cases. No nursing.

IV. Staff: Nurses—Superintendent and 11 nurses; doctor, 22. Eight of our nurses went into war service. To replace them we secured the nurses who were unfit physically for the Red Cross and those exempted. Two nurses' aides or volunteers were used. Nine of our doctors went into war service, which necessitated the others doing double work.

V. The general advance in wages did not effect the standards of living of the families with which our organization is in touch, because the cost of living increased as well.

VI. The amount of milk bought for babies and children increased 50 per cent.

VII. As a war measure our organization is undertaking to pay the salary of a nurse who devotes her entire time to teaching every 8th grade girl in public and parochial schools, the care of the baby, under the Little Mothers' League.

We are planning to care for the children of mothers engaged in gainful occupations outside of their own homes, in private homes instead of nurseries.

VIII. Under the Children's Year Campaign, we weighed and measured 4,199 babies, following those below par.

IX. Care of children of pre-school age: We see that physical defects receive attention.

X. Total budget, \$16,608.50.

Consultations given at clinics are free. For home nursing the fee is based upon the circumstances of the family. The mothers whose financial circumstances have been improved by the advance in wages, continue to attend our conferences and ask our advice.

XI. We co-operate with the Division of Child Hygiene of the City Department of Health, and we supervise the infant welfare work done by the State Health Department.

XII. Prenatal Care: Total number of infant deaths during first month, 2. The average time at which the pregnant woman comes under our care is at the fifth or sixth month, but we have had a case as early as the second month.

Midwives: Percentage of births attended by midwives, 7 per cent. Number of babies on our roll whose births were attended by midwives, 290 in 1918, against 339 in 1917.

Postnatal Care: Age limit of children under our care, 5 years. Total number under one year cared for, 1,405. Total number between 1 and 5 years cared for, 302. Total number of infant welfare conferences each week, 8. Average number of babies in attendance each week, 128.

820 babies under 3 months were brought under our care; 535 babies from 3 months to 1 year; 237 babies from 1 to 2 years; 95 babies from 2 to 5 years. In 1917, 65 per cent of the babies born have come under our supervision, and 72 per cent in 1918.

Total births for year ending Dec. 31, 1917, 3,295; 3,093 for 1918.

Owing to influenza, there has been an increase in the death rate among children under 1 year, of from 6 per cent to 7 per cent in 1918.

	1917	1918
New cases	922	1,155
Cases carried over	361	582
Non-Clinic cases	561	221
Midwife cases	839	290
Total number of different patients cared for.....	2,183	2,248
Different babies attending Clinic.....	1,283	1,737
Total number of visits to Clinics.....	5,937	6,494
Number of Clinics held	404	387
Average daily attendance	14.5	16.78
Highest daily attendance	54	55
Lowest daily attendance	1	1

Nurses' Report

Number of visits made by nurses.....	14,280	15,308
Telephone calls about patients.....	2,632	3,778
Miscellaneous calls	627	1,140
Clinics in school closed due to fuel shortage last winter, and Influenza epidemic last month.		

Influenza Relief Bureau—Work Done for City by Clinic for Infant Feeding**Workers:**

Sisters of Mercy.....	16		
School Nurses	4	Cases cared for	112
Red Cross Nurses' Aides.....	4	Visits made	218
Total	24		

Different Patients Attending Clinics

	Central	South	West	East	Total
New cases attending Clinics.....	639	138	224	154	1,155
Old cases attending Clinics.....	253	90	120	119	582
Total number of different babies...	892	228	344	273	1,737

Classification of Ages

Under three months.....	870
Between three months and 1 year.....	535
Between one and two years.....	237
Between two and five years.....	95

Total1,737

Nationalities

American	977	Italian	23	French	4
Polish	401	Jewish	7	Finns	2
Holland	229	Hungarian	5	Irish	3
German	11	Swedish	7	Australian	2
Lithuanian	27	Assyrian	31	Russian	1
Indian	2	Armenian	5		
Total					1,737

Midwife Report

Cases reported from Board of Health.....	292
Cases investigated	290
Cases not located due to improper address.....	2
Different babies supplied with breast milk.....	60
Different mothers supplying breast milk.....	43

Yearly Prenatal Report—1918

Patients under our care from 3 to 6 months.....	
Number of patients registered at Clinic since Nov. 1915.....	546
Number of Clinic patients	329
Number of non-Clinic patients	217
(These include patients not examined by physicians, or entered too late to be carried as regular Clinic patients.)	
Number of Clinics held during the year.....	51
Number of Clinic patients registered this year.....	124
Number of non-Clinic patients registered this year.....	56
Number of patients examined by Clinic Doctor.....	109
Number of patients not examined by Clinic Doctor.....	15
Number of patients having private doctors for confinement.....	70
Total attendance of patients during year.....	357
Babies born	118
Babies born at home	56
Babies born in hospital.....	62
Prenatal babies brought to Clinic for infant feeding.....	79
Stillborn babies	6

Premature Babies:	
1 at 8½ months lived	
2 at 8 months lived	
2 at 7 months died (see following item).....	5
Infant Deaths:	
This rate exclusive of stillbirths	
Premature 7 months lived 1 hour, Albuminuria (mother)	
Premature 7 months lived 1 day, Tapeworm (mother)....	2
Maternal deaths	0
Patients specific	2
One patient had treatment, the other did not. Both babies stillborn.	
Number of calls made by two nurses during the year.....	2,678
Owing to scarcity of physicians it was inevitable that at times there should be none at Clinics, which accounts for the fifteen patients not examined. Of these three went to hospitals for confinement.	
Deaths of City babies under one year.....	219
Births for 1918.....	3,093
Stillbirths	133
Death rate of City's babies under one year of age.....	7 per cent
Deaths among Clinic babies:	
Under one year.....	17
Between one to five.....	3
Total	20
Death rate of Clinic babies under one year of age.....	5 per cent
Death rate of Clinic babies from birth to five years.....	8 per cent

MARY MARGARET ROCHE, R. N., *Superintendent*

MINNESOTA

INFANT WELFARE DEPARTMENT DULUTH CONSISTORY SCOTTISH RITE MASONS Duluth

The Infant Welfare Department of the Consistory Scottish Rite Masons was organized in the spring of 1911, at the Masonic Temple of Duluth, with an acting physician in charge during the clinic season, together with an "all-year-round" nurse who co-operated with the physicians of the city towards the furthering of Infant Welfare Work.

Among the problems rendered acute by the war, was the "milk problem." War conditions necessitated the changing of our physicians who were familiar with the activities in this Baby Welfare Work, and which, later, created lack of interest among many of the mothers. The Scottish Rite Infant Welfare Department has an organized staff consisting of two nurses and two physicians for the summer months only, and one nurse for the entire year. Two physicians and one nurse entered the service. To replace them, we secured the services of two local physicians and one school nurse for the summer months. Nurses' aides and volunteer workers have not as yet been called upon by our organization.

We have noticed no particular effect of the general advance in wages upon the standards of living owing to the increase in living expenses. Owing to the recent prohibition in this territory, marked improvement has been shown in the homes where the fathers have been intemperate.

The amount of milk purchased for babies has increased during the year. Our department is rendering all assistance possible in the reducing of infant mortality by "constant work" with the mothers as regards the diet and general care of their babies.

We have also undertaken at the request of the Council of National Defense and the Children's Bureau, some of the weighing and measuring of children of pre-school age, in Duluth. 1,041 babies and children were examined. Follow-up surgical care was given to 11 babies and general treatment was provided for those needing it, at our clinic.

In the weighing and measuring tests, 275 children between the ages of three and six years were examined. Free attention has been given all of these children who require special care.

The City of Duluth Health Department supervises prenatal and obstetrical work, while we supervise infant welfare work.

Approximately 2,264 births were registered in Duluth in the year ending December 31st, 1917; 296 deaths of babies under one year old; we have registered for the same period 92 stillbirths and 77 deaths the first month.

There has been a slight increase in the death rate which we attribute to the prevalence of pneumonia this past winter. Better housing conditions and improved standards of living would afford a means to combating such a condition.

Midwives attended 304 births during the year, approximating 13½ per cent of births in the city.

The age limit of the babies for whom we care, is three years, although frequently, it is necessary for us to work with children beyond this limit. Making the Government test we worked with 275 children over three years of age; 399 babies under one year of age came under our observation in the same work; 641 from one to six years.

In order that the public might be served more advantageously we have divided our city into three districts, each district having an infant welfare station where the nurse in charge can be consulted daily by the mothers as well as attending the semi-weekly one and one-half hour clinic sessions held from June 15th to Oct. 1st.

The attendance at these clinics varies considerably. At one of the stations we average seven plus babies; at another, we average eight plus babies, and the third, thirteen plus babies. The babies are brought under our care after the physician in charge leaves the case. This occurs during the first year, although frequently, a surprise is given us by a baby being presented at the clinic when but a week old.

About 399 births or 18 per cent in the city came under our supervision at the clinics, or weighing stations; aside from this several hundred of the 1,251 new cases listed during the year, received assistance and advice from our nurses in their homes who did not attend our clinic.

We co-operate with the Associated Charities and all local existing organizations for the betterment of child welfare. We also report annually to the Children's Bureau of the Federal Government, as well as obtain suggestions from the State Board of Control.

ESTELLE M. GOERING, R. N., *Nurse-in-Charge*

INFANT WELFARE SOCIETY Minneapolis

I. & II. Organized in 1910.

III. The most difficult problem which we have had to solve during the year has been that of keeping our medical and nursing staff up to its normal size and quality.

IV. Under normal conditions we employ 6 nurses, and sometimes have as many as 5 physicians. We are now paying all of our infant welfare doctors for their services.

Four of our nurses left us to go into war service. We have hired new nurses to replace them and have tried to employ those not eligible for Red Cross or army service.

We have not as yet had to use nurses' aides or volunteers.

Three of our physicians have entered war service. We have employed women physicians to fill these vacancies and one of these doctors is taking care of three stations.

V. While the wages of the class of people with whom we come in contact have been increased, the rise in the cost of living has been such that no very marked difference has been noted in the standards of living.

VI. No statistics on the amount of milk purchased are available, but the demands upon us for emergency milk supply have been fewer than ever before.

VII. As our work has been increasing markedly, we have opened a new station and expect to open a second new one January 1st. As a war measure we have been trying to extend our prenatal work.

VIII. Our organization has worked closely with the Child Welfare Committee of the Women's Committee of the Council of National Defense and helped in the Children's Year Exhibit during Baby Week, in the weighing and measuring of babies and in the Traveling Exhibit which was shown in various communities of Minneapolis during the summer.

In working with the Child Welfare Committee, we have assisted them somewhat in their follow-up work.

We give no supervision to children of pre-school age. Our work is with babies up to the age of two years.

X. Our expenses for the current fiscal year (ending December 31, 1918) will be approximately \$8,094.

Our organization is supported entirely by voluntary contributions.

We have not found it necessary to make a special appeal for funds during the last year. Practically the entire amount of our contributions has been raised by letter.

We do not insert paid advertisements in our local papers for the purpose of raising funds.

Minneapolis is to have a War Chest for 1919 which is also to cover local charities and we are to share in these funds.

Our work is given free of charge

The mothers whose financial circumstances have been improved by the advance in wages continue to come to us for advice.

XI. Affiliations: We co-operate closely with hospitals and other organizations and are affiliated with the University of Minnesota.

We are in touch with the Children's Bureau and try to co-operate with them in their plans for child conservation.

The medical director of our organization is also the director of the Bureau of Child Conservation of the State Department of Health.

XII. Statistical.

a. Prenatal Care.

Our prenatal work began in August 1917, so we have not as yet had a full fiscal year's records.

b. 15.9 per cent of the births in Minneapolis in 1917 were attended by midwives.

c. Postnatal Care.

Age limit of babies under our care, 2 years.

Total number under 2 years cared for, 3,353 (1917).

Total number infant welfare conferences weekly in 1917, 9; at present, 11.

Average number of babies in attendance each week, 142.

924 of our 1,407 new cases in 1917 came to us when under 6 months of age. Many come at two and three weeks.

d. Total births in Minneapolis for year ending Dec. 31, 1917, 8,660.

Total deaths under one year for year ending Dec. 31, 1917, 620.

Only 33 deaths were reported among the 3,353 babies enrolled with us.

Death rate, 1916, 82.47 per 1,000 births; 1917, 71.59 per 1,000 births.

E. J. HUENEKENS, M. D., *Medical Director*

BABY WELFARE ASSOCIATION**St. Paul**

Organized in 1911. Incorporated July 1912.

III. Nothing but an increase in the number of cases attending clinic.

b. The only change has been in the greater need for home visiting by the nurses.

IV. Eight doctors, one supervisor and six nurses.

b. The doctors serve in groups of two or three, having a three months service. None receives any gratuity. Nurses receive for the first year \$75 per month, and afterwards \$80 per month.

c. The Supervisor is paid \$2,000 per annum.

d. Two nurses have gone into war service during the past year. Their places were filled by engaging two others.

e. We have not used any aides or volunteers.

f. Two of our physicians have entered war service. Their work is done by those remaining.

V. The effect, if any, that the advance in wages might have made in the standards of living has been overcome in our families by higher living expenses.

b. The health and general welfare of our babies is practically the same.

c. We have practically no clientele among the colored population. In St. Paul there is no indigent colored population.

d. In the mothers of foreign birth the situation has changed but little if any.

e. We have no specific groups.

VI. The amount of milk bought has increased owing to an increased number of children due to cases referred by the Red Cross where the fathers have entered war service.

VII. We have not undertaken any special work as a war measure.

b. A very small number of our mothers are engaged in any sort of occupation outside their own homes. Not more than 50, at any time.

VIII. In connection with the Children's Year Campaign this Association conducted a station for registration of children under six years of age.

b. Owing to the peculiar method employed by the Bureau at Washington no practical method of follow-up work is possible.

IX. Our work is mainly the care of children up to two years of age, but the nurses in visiting the homes advise the mothers as to diet and care of children of pre-school age.

X. About \$10,000.

Supported by voluntary contributions alone. There are no membership dues, no appropriation from city or state. Special contributions—Masonic organizations, \$1,500 annually.

We have made no special appeal for funds during the last year.

A simple statement of the needs of the Association and of the work we are doing give the best results. We have a substantial list of annual subscribers.

Our work is absolutely free.

The betterment of financial conditions, has not brought any appreciable change in attendance.

XI. We co-operate with all other charitable organizations, with the Federal Government and with the Departments of Public Health of the city and state.

We have a division of child hygiene in both city and state.

XII. a. We have given prenatal care during the year to 109 mothers; average number of months under care, 4 to 6.

We have had no deaths during pregnancy, at childbirth or during puerperium.

Infant deaths: One at birth and three during the first month.

Most of our mothers are seen first at about the fourth or fifth month of pregnancy. The earliest cases from six weeks to two months.

- b. About 1/20 of our cases are attended by midwives.
- c. Postnatal care: The age limit of babies under our care is 3 years.
Total number of children cared for last year 1,647.
Clinics are held every day with the exception of Sunday.
The average age of children first brought to this organization was four months and the earliest 12 hours.
- d. Total number of births in St. Paul for year ending December 31, 1917, was 5,147.
Total number of deaths during same period, 377.
Total number of babies cared for by this organization for year, 1,647.
Total number of deaths among babies cared for by us, 33.

MARGARET B. LETTICE, R. N., *Superintendent*

PUBLIC HEALTH ASSOCIATION

St. Paul

II. Organized 1914; succeeded Tuberculosis Association, August, 1908.

III. We have made only a limited change in our work, because of the lack of qualified nurses.

IV. Staff: Nurses, 12-24; doctors, 2.

Twelve of our nurses went into war service, and we were unable to replace them. One doctor went into war service.

VIII. Children's Year Campaign follow-up activities: We have encouraged the employment of follow-up nurses in all communities.

X. Total budget for current fiscal year, approximately \$90,000. The organization is supported by the sale of Red Cross seals.

XI. We are affiliated with the National Tuberculosis Association.

I. J. MURPHY, M. D., *Director, Field Service*

MISSOURI

ST. LOUIS PEDIATRIC SOCIETY

St. Louis

Out of a membership of 31, our Society has 16 men in the U. S. service, and this has proved such a handicap to our activities that only one or two meetings have been held throughout the year. This was due, of course, not only to the reduced membership, but also to the increased burden, teaching, practice, clinic, etc., thrown on those at home.

T. C. HEMPELMANN, M. D., *Secretary-Treasurer*

NEW JERSEY

FREE PUBLIC LIBRARY

East Orange

We secure and file material on the subject of infant welfare, for the use of our borrowers, and expect to co-operate in campaigns and exhibits in such ways as lie within the scope of a public library.

LOUISE G. HINSDALE, *Librarian*

NEW YORK

CHILD WELFARE ASSOCIATION
Binghamton

Organized July 2nd, 1913; 370 members, 9 directors and an advisory board of 8 doctors, 2 nurses.

Report for year ending July 31, 1918:

Total budget for the current fiscal year, \$1,800, raised by popular subscription and membership dues. All work done by the Association is free of charge, and under the supervision of state and local Health Departments.

The doctors give their services; only nurses are paid a salary, and we have used many aides and volunteers. The local papers gratuitously help in raising funds, and in educating the people in child conservation.

The Association is affiliated with the other organizations in our city, including Humane Society and Relief Association, Day Nurseries, Refuge, Boy Scouts, Boys' Club, and Baby Milk Station.

Total births in our city for the year ending Dec. 31, 1917, 1,668.

Total deaths under one year for the same time, 174.

The Association finds that the high cost of living overbalances the advance in wages, making a decrease in the amount of milk bought for babies.

At present about 10 per cent of mothers reached by our Association are engaged in gainful occupations outside of their homes. This is an increase in the usual number.

Day Nurseries for the care of children of employed mothers are maintained in our city.

We have had no deaths of mothers during pregnancy, at childbirth nor during the puerperium. No death of infants at birth, during the first month nor during the first year of life.

Most mothers come to us during the 6th month of pregnancy, but some come as soon as they become aware of their condition.

About 25 per cent of the births in our city are attended by midwives. The average age of children brought to us is 1 to 3 years old. Some are brought the first month.

20 per cent of the children born in the districts covered by our Association have come under our supervision.

We are pleased to say we have decreased the infant mortality in our city during the last year, and we feel sure we could decrease it still more, were it possible to keep the mother of a new-born baby at home (from working in the factories) during the first 6 months of the child's life.

950 children under 5 years of age attended.

200 clinics.

1,950 visited the stations.

78 came for lunch.

163 came for advice.

312 attended mental clinics held by the state, with state doctors in attendance.

125 physicians held clinics.

123 nurses assisted.

104 given prenatal instruction.

2,126 nursing visits.

23 enrolled in Little Mothers' League.

Children's Year Campaign: We took part in the weighing and measuring tests. Children found to be in need of special treatment have been given follow-up care.

A Better Babies Contest was held in September at the Court House, with 250 babies enrolled. The examining doctors found one 100 per cent baby.

While the war has interfered with our work to some extent, we are holding bi-weekly and tri-weekly clinics, and helping other organizations where the need seems greatest.

(MRS. W. B.) MINNIE M. PALMATIER, *President*

BABIES WELFARE ASSOCIATION

New York City

Some Activities of 1918

The year 1918 showed an increase in the death rate over that of 1917 of three points, 91.7 against 88.8, which is perhaps not so significant when it is understood that there were 3,000 less births this year than last and only 99 more deaths. It has been a year of particular effort to reduce infant mortality in that the Children's Year with its slogan "to save 100,000 lives" throughout the country has, through the organized work of its local committees, attempted to reach and follow up the city's children under five years of age by its Measuring and Weighing Tests, Patriotic Week and Back-to-School Drive, etc.

The fact that the war has deprived so many families of the breadwinners and the price of commodities has mounted so high, has been realized by those interested in child welfare work. With the price of milk going up the situation presented serious facts. Mothers are substituting tea and coffee and many children already under-nourished are becoming rachetic and ill. In view of this fact the Babies Welfare Association published a leaflet urging mothers to continue to buy milk, the safest, cheapest and best food for the children, and to cut down somewhere else in the family budget. These circulars were distributed among the Settlements, Day Nurseries, Neighborhood Associations, Department Stores, and Baby Health Stations, in an effort to reach the mothers who were not already under their supervision.

The Bureau of Child Hygiene in the Department of Health made an extensive survey of 171,691 school children to determine the condition of nutrition of these children. Facts were ascertained for the purpose of seeing what could be done to relieve the situation.

An informal national conference on "illegitimacy" was held in the early fall in Washington as the result of an interview held by the Secretary of the Babies Welfare Association with Miss Lathrop. It is hoped that the Committee on Legislation for the Children's Year will be able to work in close touch with the State Committee and in time have a definite recommendation to make the Governor, concerning the appointment of a commission, to consider a children's code for New York State.

The organization of the Maternity Center Association to conduct a city-wide campaign for prenatal care of expectant mothers has contributed largely to the efforts to reduce infant mortality. The object of the Association is to make it possible for every expectant mother in the city of New York to be brought under supervision and to receive scientific medical care, so that every child born in the city of New York might have a healthy birth and be properly cared for in the days immediately following birth. The response of the New York hospitals having maternity center service to the appeal for co-operation with the Maternity Center movement has been cordial and helpful in a high degree.

The maternity hospitals and district nurses have continued to refer babies discharged from the free wards or located in the daily visits, to the Central Office of the Babies Welfare, to be referred in turn within twenty-four hours of notice to the Baby Health Stations. The babies are under supervision of these stations until they are two years old. Although some of the hospitals have fallen off in the number of cases referred to the Central Office, during the past year, 8,212 have been referred for after care, which is 775 more than in 1917.

Total number of cases referred from the hospitals for after care in 1918:

Henry Street Settlement	2,341
Sloane Hospital	1,335
District Nursing Committee	883
Harlem Hospital	634

Berwind Free Maternity Hospital.....	548
Lincoln Hospital	508
Gouverneur Hospitals	404
Kings County Hospital	401
Jewish Maternity Hospital ..	353
Manhattan Maternity Hospital	353
Nursery and Child's Hospital.....	187
Prenatal cases referred by Department of Health.....	147
St. Christopher's Hospital.....	54
Cumberland Street	28
Association for Improving the Condition of the Poor.....	14
Fordham Hospital	12
City Hospital	10

INFLUENZA EPIDEMIC

During the weeks of the influenza epidemic the Central Office, beside the usual work, made arrangements for 650 babies and children who had become dependent due to conditions at home. Calls came in from all parts of the City to place children in emergency shelters which had been opened by the Department of Health through the co-operation of some of the Day Nurseries—Haven, Emanuel, Brightside, Eastside, Manhattanville—whose work has been mentioned in a previous report. Children were sent to convalescent homes, transportation arranged through the various Motor Corps list of names given to forlorn fathers who could afford to pay board and were forced to board the children on account of the mother's death.

The serious situation of children, in great numbers, being left motherless and fatherless after the epidemic, became the concern particularly of the Social Service Committee of the Babies Welfare Association. A committee, made up of Catholic, Jewish and Protestant representatives from the various organizations, with Mr. Thurston as chairman, was organized. The organizations represented in this committee have been finding and supervising special boarding homes for the dependent children. The Jewish organizations have formed a Joint Emergency Board, which is co-operating with the city in placing children in boarding homes; its purpose being to handle special emergency cases and help out financially where necessary.

During the past year the Association has been able to call upon an additional temporary shelter for babies—Dr. Louis Fisher's Infanterium opened July, 1918, with accommodations for eight babies—especially for babies who are feeding cases.

Manhattanville Day Nursery, which was one of the nurseries to open its doors as an emergency shelter during the epidemic, has been carrying on temporary shelter work the last months and is to continue as a temporary shelter with a charge of \$5 a week.

MARY ARNOLD, *Executive Secretary*

CHILD WELFARE DIVISION, SOCIAL SERVICE BUREAU, BELLEVUE HOSPITAL New York City

II. Organized 1910.

III. Problems rendered acute by the war: Malnutrition among children and dearth of nurses. In general I would say that we have had as our chief problem, undernourishment and the high cost of food, especially milk.

IV. Staff: Nurses, 9; Doctors in the Bellevue service. The Bellevue service is unpaid, but for the first time our Division has one special paid woman physician.

We have not yet used nurses' aides or volunteers in the Social Service office, or for visiting, but we have a fully organized body of volunteer nurses' aides working daily in the children's clinic under a head volunteer, Miss Helen Sloan, a doctor and a nurse.

V. The advance in wages has been offset by the increased cost of living. The high cost of milk has been a menace to the health and welfare of the babies.

VI. The amount of milk bought for babies and children has decreased.

VII. & VIII. War Service and Children's Year Campaign: We weighed and measured 5,000 children in our neighborhood and canvassed 11,000. We assigned many of the subnormal cases discovered, to the Bellevue Dispensary Children's Clinic.

X. Budget: Our Division is financed partly by the city, and partly by private funds. We make quarterly appeals. We have a financial secretary. No part of our income is raised by gratuitous "newspaper campaigns." We do not insert paid advertisements in the local newspapers. Our work is given free of charge.

XI. Affiliations: We are a city institution and co-operate with all local organizations, public and private.

XII. Our special effort this year has been the establishment of a special clinic for Vaginitis. We have raised a fund for this; have a woman physician, an assisting visiting nurse, and expect to use the statistics of this clinic in an effort to bring about legislation. This disease is constantly increasing, and a menace to school and home. We are advised by physicians that it is curable to a degree; at any rate self-limited and controllable under treatment, so as to remove any danger of contagion. This is a serious effort; there are only two or three such clinics for little girls in New York and we are hoping to hold conferences and achieve real results.

(MRS. SETH BLISS HUNT) ELISABETH H. HUNT, *Chairman*

NATIONAL COMMITTEE FOR PREVENTION OF BLINDNESS

Headquarters, New York City

Work is educational.

Financial. Total budget for current fiscal year about \$16,000. The organization is supported by foundations, membership dues and voluntary contributions. The committee makes special appeals for funds every year. The most successful method is that of having a qualified financial secretary make personal appeals, or send personal letters to selected lists of people who would be likely to be interested in preventive work. The Committee does not insert paid advertisements in local papers (the Survey excepted). A special fund was raised through gratuitous "newspaper campaigns" for preventive work among the sufferers of the Halifax disaster. All work done by the Committee is free of charge—traveling expenses are sometimes paid by the organization asking for special lecture; but no fee for the services of the lecturer. A charge is made for the cost of printing literature in quantity lots, single copies are sent free.

Special features of work:

- a. Special effort to see that attention is given to care of eyes of children of pre-school age (Pub. No. 13, "Saving Sight a Civic Duty").
- b. Story talks arranged for children graded to suit comprehension of children from kindergarten age.
- c. Three states have passed laws during the year for prevention of ophthalmia neonatorum.

THE NATIONAL ORGANIZATION FOR PUBLIC HEALTH NURSING
New York City

Organized 1912.

The year has been for us one of expansion to meet the greatly increased demand for public health nursing. Our membership now numbers over 2,500, and our budget for 1918 has been about \$40,000.

Our Associate Secretary has been in Government service during the entire year as Supervisor of Public Health Nursing in the Extra-cantonment zones. Early in the year we secured a generous offer of help from the Rockefeller Foundation which has made possible the opening of two branch offices, one in Chicago and one in Washington, and the employment of three additional secretaries.

One of these secretaries will carry out the terms of a contract between us and the Children's Bureau, supervising and reporting on demonstrations of nursing care of mothers and babies in five selected communities. Another has devoted the major part of her time to the problems of public health nursing education, collecting material about all existing courses, and acting as a Bureau of Information to organizations planning to open new courses as well as to nurses all over the country who wish help in getting such education.

The war condition we have felt most keenly has been the shortage of public health nurses. We are hoping to attract many who return from foreign service into this field, and are endeavoring to secure scholarships by which they may first get the special training so much needed. Co-operating with the League for Nursing Education, we have also persuaded over a hundred training schools in the country to include instruction and experience in public health nursing in their regular curricula.

The program of the Children's Year, carried out throughout the country, has increased the call for public health nurses. The influenza epidemic demonstrated their importance in any plan for guarding community health. The United States Public Health Service has included them in its national program as an integral part of good health administration.

The National Organization sees its duty clear to recruit the ranks of public health nurses, and hold high their standards of preparation and accomplishment.

ELLA PHILLIPS CRANDALL, R. N., *Executive Secretary*

NEW YORK ASSOCIATION FOR IMPROVING THE CONDITION OF THE POOR
New York City

During the past six months we have considerably increased our health work in families and in addition to our general nursing work are now conducting an intensive campaign in three of the most crowded and most foreign sections of the city. Here the nurses are making a house to house canvass in order to learn of the condition of every expectant mother, and once having become acquainted with the family in this way, to work with the mother in the interest of all of the children. Dietitians are being used with the nurses wherever there seems need of education along food lines and as a result of their work four nutrition clinics have already been established in these districts, three in the public schools and one in a diet kitchen.

WILLIAM H. MATTHEWS, *Acting General Director*

THE NEW YORK DIET KITCHEN ASSOCIATION
New York City

Organized and incorporated 1873.

Maintains 8 milk and health stations.

Activities included in the present work of the Association: Prenatal work; postnatal work, including baby conferences, home visiting and emergency care of sick babies; general educational work among mothers at the

stations and in the homes; conferences for children of pre-school age; and social service work in connection with all cases requiring it.

III. The most difficult problem this Association has had to face during the past year has been the scarcity of doctors for the baby conferences; also more difficulty has been experienced in securing nurses with necessary training than during the preceding eight years.

IV. Under normal conditions the Association has had a medical staff of 20-22 doctors, 8 assigned from the Department of Health, and 12 or 14 volunteers. During the past year the number of volunteer doctors was reduced about one-half. This reduction was due almost entirely to enlistments of the physicians in the Medical Reserve.

The Association, however, was fortunate in having the services of six fourth-year medical students to assist in the physical examination of the children who were registered at its stations in accordance with the program for "Children's Year."

Owing to the fact that public health work was recognized as essential war service, a number of its staff were enrolled as Red Cross nurses and assigned to remain with the Association.

One nurse volunteered for foreign service, and the staff was further reduced by resignations on account of illness or for reasons connected with the war.

Six nurses' aides or volunteers were used during the summer, and at all times and throughout the year use is made of such outside service. More volunteers could be used to advantage in this line if such were available for the baby conferences, home visits, etc.

V. & VI. The standards of living of the families with whom we work, have been raised in general during the past year, owing to the higher wages, and up to the time of the epidemic there had been less illness among the babies. However, the high price of milk has been a hardship, specially affecting the older children, who deprived of its use, showed the lack in their physical condition.

The amount of milk bought from our stations has decreased about 10 per cent during the past year, but there has been an evident effort among parents to supply the little baby with the necessary amount.

VIII. In connection with the "Children's Year" campaign, the Association organized its stations as examining centers, and from June, when the first examinations were made, till late in September, nearly four thousand babies and children were examined. These examinations were made by the six fourth-year medical students before referred to and by physicians from the Department of Health and others, assisted by nurses of the Association.

The Board of Managers of the Association raised among themselves a sufficient sum to pay the salaries of two nurses for six months, in order that the regular work of the Association might be uninterrupted and yet the examinations have the nursing service required.

The method followed, was to examine first the babies and children already registered with any station, and after these had received attention the district in which a station was situated was canvassed for the children not already reached by any other organization. The examinations were still going on when they were interrupted by the epidemic of influenza, and it is the purpose of the organization to resume examinations when possible, as some children had still not been reached when the work was given up. The nurses especially assigned for the "Children's Year" campaign, as well as the regular station nurses were commencing the follow-up work on such of the children as showed defects when this too had to be dropped as all nurses were required for a time to devote themselves to actual bedside care of the sick.

Now that the nurses have returned to their regular work again the securing of treatment for children needing it will be taken up once more. This work,

which was largely among the children of pre-school age, is simply an extension of the work the Association has done among that class of children for several years past, as in four of its stations conferences for its "graduate babies" and others connected with the station have been held, and it is the intention to enlarge this work as rapidly as means can be supplied to provide doctors and nurses.

X. The estimated budget for the current fiscal year was about \$98,000, but increase in salaries, supplies, etc., will undoubtedly carry it beyond this point.

The organization is supported by contributions, dues, and gifts for the most part; has a small endowment fund; and for some years has received an appropriation of \$500 from the city. One appeal was made during the last year with fair success. No paid advertisements in local papers are used.

The milk dispensed by the Association is sold at cost, but all preventive and instructional work is given free of charge.

XII. During the year, the Association has somewhat changed its policy in regard to prenatal care given the mothers connected with its stations. In six of the stations the work has been maintained as formerly, but in two stations intensive work has been done along the lines and in co-operation with the standards first set by the model Maternity Center, which was opened during the past year at 219 East 79th Street, and later on was established in various other maternity centers throughout the city under the auspices of the Maternity Center Association.

This special prenatal work has been carried on by a nurse assigned for the purpose, and the Association has also offered the use of two of its stations during certain days in the week as sub-stations of the Maternity Center in those zones where the stations are situated. The results of this special line of work have been most interesting and important, and it will, undoubtedly, be continued during the coming year.

Effective co-operation is maintained with the Bureau of Child Hygiene of the Department of Health and with such other organizations as in any way enter the same field of work.

Number of babies registered during the past year: Babies under one year, 5,290; babies under two years, 2,213.

MARIA L. DANIELS, R. N., *Director*

RIVERDALE HEALTH LEAGUE

Riverdale

II. Organized 1909.

III. The most difficult problem we have had during the past year has been to keep the young people active in their club work.

IV. Staff: Visiting nurse, 1; doctor, 1 (served without charge).

V. About 90 of the 115 young men who have gone to serve the Government contributed to family support, consequently the financial circumstances of families have not been raised generally.

No colored mothers and no foreign nationalities, but a few Poles and Italians; the residents here being mostly descended from Irish stock.

VII. There are really only 2 mothers with small children who leave their homes to work: (1) The Deacons Fund of the Presbyterian Church gives help when needed; children 3 and 5 years old stay with the neighbors; (2) boards and goes to business, doing well, one child, 4 years.

VIII. In the Children's Year Campaign we weighed and measured 104 children of pre-school age. Nearly all came up to the Holt standard of weights and measures. With few exceptions all families have their own physicians.

X. The League is supported by membership dues; no appropriations by the city or state. Whenever there is need an appeal by the nurse to people

interested in the welfare of the community brings immediate relief. Generally milk is supplied indefinitely whenever needed. Potatoes, beans, and turnips were raised this year by a philanthropic gentleman and put at the disposal of the Neighborhood Association, to be sold at a very small figure or given away, the money to be used for medical supplies in the community.

XI. Affiliations: Neighborhood Association; Van Cortlandt Chapter, American Red Cross; Parents Association; Fortnightly Club; Board of Health, Bronx; all hospitals in Yonkers and New York City.

XII. Babies born during year, 25; babies died during year, 0; babies, still-born, 1; babies, premature, 6½ months, 1; miscarriages, 2½ months, 1; sick visits, 1,440; mothers cared for, 20; social service visits, 1,505; deaths in the community during the year, 24.

LAVINIA K. CHAPMAN, R. N., *District Nurse*

AMERICAN NURSES' ASSOCIATION Headquarters, Rochester

Our work is done through our affiliated associations, one of which is the National Organization for Public Health Nursing.

KATHABINE DEWITT, R. N., *Secretary*

OHIO

JEWISH INFANT WELFARE CIRCLE Cincinnati

The Jewish Infant Welfare Circle was organized in January, 1915.

IV. Under normal conditions, we have two nurses and two physicians on our staff, one of whom is paid and the other who gives his services free. Two of our nurses and one doctor have gone into war service. In both instances we have been fortunate enough to secure others.

VI. In our Welfare Station we give milk to those who cannot afford to pay and sell it at a reduced price to those who are able to buy it. In the last year, due probably to the advance in wages, we notice that the number of milk tickets taken free of charge has greatly decreased and the number bought has increased. For example, take the following figures for three months of 1917 and the same three months of 1918:

	June, 1917	June, 1918
Sold	487	1,018
Free	1,155	625
	July, 1917	July, 1918
Sold	546	1,294
Free	1,114	780
	August, 1917	August, 1918
Sold	541	1,213
Free	1,119	436

VII. None of our mothers are engaged in gainful occupations.

VIII. We have conducted examinations of babies and children according to the Children's Bureau plan, but have not yet undertaken the "follow up" work. For the Council of National Defense our organization has accomplished the tabulation of all the Children's Year Campaign cards for Hamilton County. This tabulation has been made in such a way that the information on the cards is now available for any statistical work that could possibly be wanted.

X. Our organization is supported by the United Jewish Charities and by special subscription. We have no membership dues. Our special subscriptions are usually given by the mothers of new babies to whom we send a letter of congratulation, upon the birth of the child, asking for co-operation in our work. There is no fee charged the mothers, either for doctor's consultation or nurse's visits.

XII. The percentage of births in Cincinnati attended by midwives is 15.4 per cent. On our roll only 1.75 per cent.

We try to limit the age of children under care at the Welfare Station to three years. Total number under one year cared for, 115. Total number between one and five years cared for, 73. These figures are for the year ending September 30th, 1918.

We have one welfare conference each week, with an average attendance of twenty-five in winter and thirty-five in summer.

Total number of births in Cincinnati for the past year ending December 31st, 1917, is 7,837. Deaths under one year for the same period are 688.

FANNY A. SENIOR, *Chairman*

THE BABIES' DISPENSARY AND HOSPITAL

Cleveland

II. Organized December, 1906.

III. Our most difficult problem has always been the feeding problem.

IV. Under normal conditions we have eight nurses and seven doctors on our staff. Doctors: Two were paid for their services; five gave their services without charge. Four of the medical staff have gone into the service. Nurses: Four of our nurses have gone into the service; some volunteers and some aides have been used in the clinic.

V. Because we do no direct follow-up work we feel it would not be quite fair for us to attempt to answer the first four questions. (See No. XI.)

We have had more colored babies this year than heretofore. Out of 1,780 new patients admitted this year 261 were colored.

VI. The amount of milk bought for babies and children has increased.

We furnish and pay for all the milk prescribed by this Dispensary, also for all of that prescribed by the Division of Health Dispensaries.

We do receive an appropriation of \$3,500 from the city.

For the year 1917 our milk deficit was \$18,240.35.

We have a Milk Laboratory, but at present, we are only making the Synthetic Milk Adapted, which Dr. Gerstenberger and Dr. Ruh have been working on since 1915, to make it as near the mother's milk as possible. Dr. Gerstenberger presented this formula at the American Medical Association meeting in Chicago this year. At present there are 36 patients on this formula.

VII. We are giving a short course for volunteers.

By taking the new cases, 1,780, for the current year, we find 114 mothers were engaged in gainful occupations outside of their own homes. This number is only approximate.

The Humane Society is responsible for the finding of homes, and for the placing of all children whose mothers have to work outside of their own homes.

All children under three years of age who are to be placed in boarding homes are first examined here; they are given a Wasserman test and a von Pirquet test.

The Humane Society is also responsible for the supervision of the homes after the children have been placed.

VIII. We feel that in peace times our work has been so comprehensive and inclusive that we have never been able to live up to our ideals, therefore, we consider it broad enough for war work.

IX. Our work is sick clinic work only—children up to three years of age.

X. Financial: Budget for current year, \$49,440.68.

Most of our funds, designated and discretionary, are received through the Welfare Federation of Cleveland, newspaper publicity, written appeals, moving picture campaigns, and this year through the Victory Chest.

Our most successful methods in raising funds have been newspaper publicity, written appeals and moving picture campaigns.

In 1915 we inaugurated a fee system which is as follows:

	First-Visit	Subsequent Visits
Class I.....	50c.	25c.
Class Ia.....	25c.	15c.
Class II.....	20c.	10c.
Class III.....	10c.	5c.
Class IV.....	0	0

Class I and Class Ia are families sent to the Dispensary for massage and electrical treatment by their own private physicians, therefore, can afford to pay more than the regular Dispensary patients.

XI. Since February 1917 we have done no direct follow-up work—only the sick clinic work. A report of every case admitted here is given to the district in which the patient lives, and the Division of Health nurses make all the home calls and carry out treatment prescribed here. We, in turn receive a report on each case from the district carrying it.

We accept children up to three years of age. After they are three years of age they are referred to the different hospital dispensaries, if they cannot afford the services of a private physician.

There is a Bureau of Child Hygiene in the city, also in the state.

XII. We do no prenatal work, as that branch of the work is carried on by the Western Reserve Maternity Dispensary, and all of our cases are referred there.

c. Postnatal Care: Activities.

We take children up to three years of age.

Dispensary for sick babies.

Hospital care for sick babies: Out-door Ward for sick babies open two and a half months during the summer.

Lectures and clinical experience to Western Reserve Medical students.

Staff is part of faculty of the School of Applied Social Sciences of Western Reserve University.

Massage and electrical treatment three mornings a week to anterior poliomyelitis cases, or any case having had paralysis; 38 individual cases treated during current year.

1,780 new cases admitted.

14,728 total attendance.

1,532 days treatment given in Out-Door Ward.

MARGARET H. HOPE, R. N., *Superintendent of Nurses*

PENNSYLVANIA

BABIES' HOSPITAL

Philadelphia

II. Organized June, 1911.

III. Most difficult problems to solve during the past year: Scarcity of physicians and nurses.

IV. Staff: Doctors, 14; nurses, 6 to 20; 2 of whom went into war service. None of our doctors are paid for their services.

Nurses' aides and volunteers are used whenever possible to obtain them.

VI. Amount of milk bought for children has increased.

VII. As a war measure our hospital has attempted more extensive and more intensive work along present lines.

About 15 per cent of our mothers are engaged in gainful occupations outside their own homes.

This represents an increase over those usually so employed. We refer the children of mothers thus employed to suitable organizations.

IX. Care of children of pre-school age: All children followed regularly until 6 years old.

X. Budget for current fiscal year, \$25,575.46. The hospital is supported by voluntary contributions and membership dues. We made a "Whirlwind Campaign" for our building fund last year.

No charge is made for services rendered by the hospital, but contributions are encouraged.

RENA P. FOX, R. N., *Superintendent*

THE BABIES' WELFARE ASSOCIATION Philadelphia

The Babies' Welfare Association of Philadelphia was organized March 30, 1914, and incorporated under the laws of the Commonwealth of Pennsylvania, April 22, 1918.

It has for its purpose and scope—to secure and disseminate information regarding infant welfare work and to promote and carry out such activities as have for their object the conservation of infant life.

VIII. When the Children's Year was inaugurated by the Federal Children's Bureau at Washington a special committee from the Board of Directors was appointed to formulate a plan of work for the year to be undertaken by the Association. To inaugurate the campaign for the saving of the 1,438 infant lives (the quota allotted to Philadelphia) a joint meeting was called under the auspices of the Babies' Welfare Association and the Philadelphia Pediatric Society on April 5, the night preceding the beginning of the Children's Year. The meeting was addressed by Miss Julia C. Lathrop, Chief of the Federal Children's Bureau, and Dr. Jessica B. Peixotto, Executive Chairman, Department of Child Welfare of the Council of National Defense, who outlined in detail the plan of the campaign to be conducted throughout the United States. The following is the work planned and carried out by the Committee on the Children's Year of the Babies' Welfare Association:

- A lecture bureau in the Central Office from which is supplied qualified lecturers on various subjects pertaining to baby welfare for the different agencies who are members of the Association.

- The establishment of a bureau of information in the Central Office.

- A series of articles on baby saving published in newspapers and the Weekly Roster.

- Assisted in the organization of the following:

- Prenatal clinics.

- Health clinics for well babies.

- Neighborhood campaigns to reduce infant mortality.

- Co-ordination of the work of existing child welfare agencies.

XII. Prenatal Care: Addresses have been given before Women's Clubs, Medical Societies, Suffrage Societies, Hospital Associations, etc. No occasion has been lost, both in season and out of season, to speak before professional and lay audiences upon the importance and great need of prenatal work. Some new prenatal clinics have been started in this city through the influence and with the aid of the Prenatal Committee, and the Committee feels much encouraged with the increasing interest shown in the care of the expectant mother in Philadelphia.

The questionnaire used in the annual survey of prenatal work in Philadelphia has been revised. The Federal Children's Bureau at Washington suggested some changes and additional questions to be included and requested that the result of this survey be sent to them each year. (*See tabulated statement.*)

Other Activities. Training Schools for Nursery Maids: The Committee on Infant Welfare Nursing has been considering ways and means of establishing training schools for nursery maids and much work has been done by the Committee. Visits have been made to institutions where it was felt the establishment of such training schools could and should be accomplished, and many interviews were held with representatives of these institutions for the discussion of detail. The result of this work has been the establishment of one training school for nursery maids and the formation of plans for the starting of three others as soon as the necessary arrangements can be made by the governing bodies of these three institutions.

The Committee on Infant Nutrition made arrangements for numerous demonstrations and lectures on the practical preparation of foods available during the war by the Home Economic Service of State College working under the United States Food Administration.

A Conference on Infant Conservation was held in January. Addresses were made by experts in infant welfare work who came to participate in the Conference from Boston, New York and Washington. The subjects considered were—prenatal and obstetrical care, maternity insurance, municipal nursing and the milk problem. There were 375 individuals present at this Conference.

The Committee on Children's Year in the month of July inaugurated a baby saving campaign in the 30th Ward called the "30th Ward Baby Health Drive," which was conducted jointly by the Babies' Welfare Association and the Division of Child Hygiene of the Bureau of Health. Associated with them were all the agencies interested in the welfare of babies working in the Ward and with the co-operation also of the general societies interested in the baby.

Two tents were erected in the playground in this Ward which is located opposite the Children's Hospital. In one tent was installed a baby health exhibit—it consisting of illustrated charts and models teaching in a very graphic way the proper care of the baby and the prevention of disease. The exhibit was demonstrated by nurses from the Division of Child Hygiene who were present at all times to give advice. Pamphlets were distributed covering many subjects, such as: Infant care, care of milk in the home, prevention of tuberculosis, elimination of flies, etc.

The second tent was a large auditorium seating seven hundred people. In this tent lectures and demonstrations were held every afternoon and evening to large interested audiences. Each lecture was on a different phase of infant hygiene or preventive medicine given by the leading pediatricists and representatives of the most important agencies working for the welfare of babies in Philadelphia. The demonstrations which were given by trained nurses and representatives of the United States Food Administration consisted of the actual cooking of food, the preparation of the bottle for the artificially fed baby, bathing and dressing the infant. Lantern slides and motion pictures were also used.

At each session there was an interesting entertainment furnished, such as patriotic community singing, music rendered by soloists, quartettes and choirs, and on a number of occasions a band was present. This entertainment which preceded and followed the demonstrations and lectures proved very helpful in bringing the people to the tent.

Some of the most important work of the Drive was that done in the individual homes of the babies by the Bureau of Health Nurses. Preceding the Drive an infant welfare census was taken. The Ward was carefully mapped out and the City Nurses visited every home in the Ward to determine the presence of babies and their state of health; the number and ages of the other children in the family, the presence of lodgers, and the number of families in the house. A special effort was made to discover the presence of any illegal baby farms and to take a census of the number of expectant mothers in the Ward.

During the census taking an intelligent woman was selected in each block in the Ward and a permanent organization called the "30th Ward Mothers' Council," formed with the Department for the Prevention of Disease of the Children's Hospital acting as an advisory committee. The Council holds regular meetings when they make reports of the babies in their block and any unfavorable condition existing detrimental to the health of the babies and small children in their block.

A corps of sanitary inspectors from the Bureau of Health made a house to house survey of the Ward. Each infraction of the sanitary requirements was carefully noted and every effort made to correct the conditions inimicable to the health of the citizens of the Ward.

During the Drive a baby health clinic for well babies was held daily at the Children's Hospital in addition to the various dispensaries conducted at the hospital for sick babies. The infants were weighed and measured and a thorough physical examination made by the physician in charge. Each mother who brought her baby was presented with an attractive weight chart on which to record the future development of her infant.

The expectant mothers were urged to come to the prenatal clinic conducted regularly at the Children's Hospital.

A vaccination clinic was held to vaccinate all the babies in the Ward against smallpox and diphtheria. Several hundred children were given the Shick test to determine whether or not they had a natural protection against diphtheria.

In addition to the clinics two permanent classes for girls were started at the Children's Hospital. One a Health Club and the other an Infant Welfare Club. Here the girls are taught by expert infant welfare nurses the correct way of caring for the baby.

Another activity of the Committee on Children's Year is the arrangement for the scientific study of infant welfare work. Monthly meetings are being held where interesting and instructive subjects are taken up and discussed. The first meeting held in September was on the subject of "maternal and infant welfare."

ELIZABETH HOFFMAN, *Assistant Secretary*

THE CHILD FEDERATION

Philadelphia

I. & II. The Child Federation was organized as the Child Hygiene Committee in May, 1912; incorporated as The Child Federation September 30th, 1913.

III. Problems in infant and maternal welfare work rendered acute by the war, etc. (See supplemental report.)

IV. Medical and Nursing Staff: At Health District No. 1, located at 12th and Carpenter Streets, and operated jointly by the Child Federation and Bureau of Health, the Child Federation employs one full-time physician and an interpreter. The nurses are provided by the Division of Child Hygiene of the Bureau of Health.

V. Effect of general advance in wages upon standards of living, etc.: While the wages of a considerable proportion of the working population have been advanced because of war industries, not only have prices also advanced, but supplies have been scarce, dwellings especially. At the beginning of the war and the wage increase a considerable number of families moved into better homes. Later the scarcity of dwellings caused the population to become almost static; meanwhile conditions became more insanitary and house overcrowding increased. That is, while for a considerable proportion of the wage earning population wages increased, the purchasing power diminished materially and some necessities, as suitable dwellings were not to be secured at all. Houses

that had not been inhabited for years because of their unfit condition, were occupied. Meanwhile that part of the community whose wages did not increase, suffered privation.

VII. War Service. (*See supplemental report.*)

VIII. Children's Year Campaign. We are in full sympathy with the purpose of the Federal Children's Bureau to direct public attention to the need for child saving, but our resources were so completely utilized in carrying on work already undertaken and planned that we could not take part in the weighing, measuring, etc., program. For our work, see typewritten statement.

IX. Care of children of pre-school age. (*See supplemental report.*)

X. Financial. Total budget for the current fiscal year, \$13,500. Organization is supported by special contributions. Special appeal made for activity funds. Personal appeal most successful method in raising funds. Do not use paid advertisements. Income not raised by gratuitous newspaper campaigns. There is no charge in connection with work done by The Child Federation.

XI. Affiliations. (*See supplemental report.*)

XII. Statistical. The work of the Child Federation is, except where we are conducting experiments, carried on through other agencies. For example its chief activity this year has been the establishment and maintenance of the Child Welfare Committee of the Philadelphia Council of National Defense. This committee is composed of representatives of the chief agencies which have to do with children and it is they to whom most of these questions apply. We however, send you answers to the questions which refer to conditions generally as follows:

Midwives. Approximate percentage of births in Philadelphia attended by midwives, 19.4.

Total births in Philadelphia for the year ending December 31, 1917, 42,000 (estimated).

Total deaths under one year in Philadelphia for the year ending December 31, 1917, 4,617.

There has been an increase in the death rate among children under one year in Philadelphia.

(These statistics were compiled by the Bureau of Vital Statistics in the Department of Health.)

XIII. Increased mortality and morbidity attributable to

Insufficient number of municipal nurses.

Centralization of interest upon war problems.

Difficulty in securing financial support for various child welfare agencies.

Inadequate appropriation for and laxness of health administration.

Widespread let down in living standards and to house over-crowding.

Influenza epidemic.

Supplemental Report

The three principal functions of the Child Federation are:

1. Research, or study of the effectiveness of different child welfare activities.
2. Aid in co-ordinating the efforts of child welfare agencies.
3. Initiation of new work of experimental character and carrying it on until its value is established.

That is the Child Federation does not itself seek to carry on child welfare work of one clearly defined type, but rather to aid other existing agencies. When it does take up a definite line of work which falls without the fields of existing agencies it carries it on only through the experimental stage or until

the city or some other agency can take it over. Illustrative of this is Health Center No. 1 in one of the most crowded Italian sections of Philadelphia.

Health District No. 1. The center in this district was established by the Child Federation in 1914 and proved so valuable that the city Department of Health has now established seven others. The Department has also taken over much of the work at the first center, but three features of it which the Federation deems of great value, in that particular section at least, the city has not yet duplicated or taken over; the full-time physician, the interpreter and the stenographer. (Since this was written the City has taken over the stenographer.) The other centers have only nurses and a part-time physician. Consequently the Federation has continued to support these and because of them, the Director of Health states, the first Health Center is still the best.

One of the values of the stenographer is that she makes possible the keeping of records which, when the pressing needs of the moment have somewhat abated, will furnish the basis for a study of results achieved that we have had in mind for the past year. These records now have been kept long enough to be of statistical value. In this connection it should be mentioned that in the first health district six blocks have been set aside for intensive work by nurses in the hope that we shall be able to show an appreciable difference in the health of their inhabitants.

Little Mothers' Leagues. Another instance of continued work is the Little Mothers' Leagues which the Federation first organized in 1913. The first year there were 20 of these leagues held in the public schools. The number last winter was 49. During the past summer we made arrangements for leagues or classes in 75 public school playgrounds, but owing to the resignations of teachers at the last moment only 62 were conducted during July and August. The average attendance was 1,161 girls and 100 real mothers, 833 of whom completed the full course and received our certificates. Of the girls who attended the classes 663 were then caring for 801 babies. In this work we use as teachers nurses of the Division of Child Hygiene of the City Department of Health, public school teachers and other volunteers. We furnish a simple text book and a full equipment that costs approximately \$30. The equipment, which is packed in a large clothes basket, consists of a doll 24 inches high and all the articles needed to demonstrate proper care, from a tin wash tub to the necessary clothes. The text book we have this year published in pamphlet form. The teachers themselves receive a course of instruction from a physician who ranks among the leading child specialists of the country.

The Domestic Economy Department of the public schools has so far approved of the Leagues as to take over their work in its classes—which are for seventh and eighth grade girls only. This year, however, oppressed by a desire for economy, the Board of Education cut out the appropriation for equipments, so the Federation supplied what was needed in order that the work might not be disorganized just at the time when it is most necessary because of the calling of women into industry.

Day Nursery Study. We have made studies of the work of other agencies, which have proved of definite practical value. Illustrative of these is the study and report on day nurseries made in co-operation with the Association of Day Nurseries. The recommendations in this report, which are highly praised by Miss Julia C. Lathrop of the Federal Children's Bureau, have been adopted by all the nurseries in the Association, now numbering 23.

The value of high standards in these institutions today when they are being used to capacity as one result of calling mothers into war industry, can scarcely be overestimated.

The Child Welfare Committee. This year the Federation, while carrying on its continued work, has devoted most of its energies to aid in co-ordinating the work of other agencies which deal with the health of children. Philadelphia, like other cities, has a large number of organizations that touch this

field at different places. With America's entrance into the war the work of these agencies was greatly increased, their resources in some cases diminished. It was necessary to eliminate all waste or duplication of effort and to make effort effective. As in other states, there was organized in Pennsylvania a Committee of Public Safety, now the State Council of National Defense, with several departments, one, the Department of Civic Relief, established a committee for Philadelphia. One of the latter's sub-committees bore the title "Child Welfare." When the State Council recently organized a Philadelphia Council of National Defense, the Child Welfare Committee became a part of it.

During 1917 this committee was not active because of lack of funds, the state organization not being in a position to finance it. The directors of the Child Federation therefore, at a special meeting last winter, voted to put the Federation's resources back of the Child Welfare Committee and make its work the Federation's contribution for the year. The managing director of the Federation became chairman of the Child Welfare Committee and associated with him representatives of other leading children's agencies the city Health Department, the Woman's Council of National Defense, the Visiting Nurse Society, the Hospital Social Service, the Housing Association and other organizations.

The Committee's Task. The committee set for itself the task of defining the fields of the different agencies, the association of those with like purposes and methods and the adoption by each association of standards which should be accepted by all the members, as had been done by the members of the Association of Day Nurseries.

The task was full of practical difficulties, as may be illustrated by the fact that most of the hospitals and dispensaries are located in three groups. So the three adjacent districts are well served while other large districts are difficult of access. This has led to a great waste of time, money and effort, as patients constantly pass one institution to go to another and workers from several institutions take long trips to the same distant area to visit a few patients who could be as well attended by a single worker. Yet as each institution had its established clientele and as few—because of their close grouping—had natural districts of their own, it was not easy to secure general acceptance of any plan of division of work. The difficulty was further enhanced by difference in standards as between different institutions which made the better ones reluctant to turn over work to the others. Yet the raising of standards seemed practically impossible at a time when overseas demands were both reducing contributions and drawing away physicians and nurses.

Despite these difficulties the Committee has made considerable progress. It has secured the acceptance of a district plan for the city by the city-wide agencies, each of which will as rapidly as possible adjust its work to the new districts and meanwhile will keep its statistics in accordance with these districts so that the records of one may be compared with those of the others and with the federal census reports.

War Time Needs of Children. Meanwhile the committee undertook a study of the war time needs of children in the city, beginning with day nurseries, so that it may know which agencies most need strengthening or developing. It had scarcely begun to make its plans for this study when it found that the Seybert Institution in co-operation with a research class at Bryn Mawr College was planning a study of wage-earning mothers along somewhat similar lines, though with a more academic purpose. It therefore proposed to join this group so instead of duplication the work might be divided and the results made available to all. This proposal was accepted, and the work is now under way.

Of course such co-ordination of effort as this is a slow process. Tangible results could have been achieved much more quickly if the Federation by itself had undertaken a study, say of the war time need for day nurseries. But that would have left out of account the need for increased service by the instructing nurses of the Division of Child Hygiene and the Visiting Nurse

Society, of the need for better housing, for health centers, for a dozen other things that affect child welfare and are just as much war time needs. Of course there is no halt in the work all the agencies are now doing, instead there is a general increase of work for all. The purpose of the Committee is to draw them together for a better understanding of what each can contribute and so produce in the end a balanced program that will prove both of present value and of continuing value during the trying period of reconstruction that will follow the war.

The Value of This Policy. There recently have been two illustrations of the value of this policy, as yet only partially carried out as it has been. Both have to do with the Women's Division of the U. S. Employment Service. The employment service found that many of the women it had enlisted in industry were naturally worried about their small children. The first proposal was to establish factory day nurseries. A representative of the service was, however, referred to the Child Welfare Committee and a meeting arranged with the representative of the Association of Day Nurseries which resulted in

1. Full information as to existing day nurseries being furnished the Employment Service so that employed mothers might be told of those near their homes.
2. An offer to care for the young children of employed mothers up to the capacity of the existing day nurseries.
3. An offer to manage and supervise such new day nurseries as are needed if the government or the employer will finance them.

Almost immediately after this we learned that one employer had proposed to establish a day nursery in his factory with a "kind-hearted Irish woman" in charge, as a means of holding his women employees.

The second illustration was a sequel of the first. The day nursery proposal lead us to make inquiries which developed the fact that the Employment Service, then just established, like the military draft in its first months, did not classify those whom it enrolled. An expectant mother, a mother with a nursing baby, a mother with children two or four years old, was to it the same as an unmarried woman. To be sure it had on its record card a space for "Number of Dependents," but the answer might be the figure one or two, giving no information as to whether the dependent was a mother, a nephew, a fourteen year old school boy or a one year old baby.

Arrangement With U. S. Employment Service. The committee at once took this matter up with the local head of the Woman's Division of the Employment Service, the State director and the National director at Washington. It found them all most responsive and as a result agreement was reached on two points:

1. The examiners are to ask every woman applicant for work the number, sex and age of her children. These will be then set down on the card in the following brief form under "Number of Dependents:" B. 2 10, G. 5.
2. Expectant mothers and mothers with children under one year of age (nursing babies) are to be put into a special class and referred to a social worker, supplied by the committee, who will have room in the employment office, and who will try to meet their needs in such a way as not to jeopardize the welfare of the children. In this she will have the active co-operation of all the child welfare agencies. A special committee of representatives of agencies which do the best case work has been appointed to work with her.

Now comes the second illustration. The college professor who has general charge of the study of wage-earning mothers above referred to, had, during her vacation, thought of the woman's division of the U. S. Employment Service as affording an exceptionally good means of securing much of the data she wished. So on her return she went to the local head of the division only to

learn what had been done by the Child Welfare Committee during her absence. At first this looked to her like—well, duplication. But as the Committee had been working with her on the plans for the study, she found that its arrangements with the Employment Service fitted in with her plans, that the data on the application cards was what she needed, and that the follow-up work in which her graduate students and the Committee can co-operate may in large measure be divided between them with results equally valuable to both. Had there not been close touch between the organizations there would probably have been two studies, with consequent waste of time and money, or possibly a refusal by the Employment Service to permit one of them, with a consequent development of feeling that would not make for efficiency.

The Influenza Epidemic. The most spectacular illustration of the co-operative spirit which the Child Welfare Committee has fostered during the past year was afforded during the recent influenza epidemic. This scourge found Philadelphia quite unprepared. The Health Department was unable to deal with the emergency, so many citizens' organizations stepped into the breach. But instead of each seeking to work in its own way they were brought into a working relationship under the general supervision of the Philadelphia Council of National Defense of which the Child Welfare Committee is a part and the Disaster Relief Committee of the Red Cross, upon which also were representatives of the Child Welfare Committee. Most of the organizations found work within their usual field. There were services needed, however, that fell without the functions of existing organizations and these services, representatives of the Child Welfare Committee already accustomed to acting together, undertook. For instance, they organized a Bureau of Information which was open night and day. Here was assembled all information likely to be of service to sufferers, as headquarters for nurses, that for ambulances and motors, the number of available vacant beds in hospitals each day, the place where volunteer nurses and helpers should apply for enlistments, etc., etc. The telephone number of this Bureau was widely advertised and for days the operators, hospital and other social service workers, were tested to the limit of their endurance by the constant calls on the twenty telephone lines. The Child Federation loaned two members of its staff to this Bureau to put and keep in form for the quickest use the information needed. One of them also had charge of the Bureau during certain hours of the day and did some of the verification visits in cases reported urgent, as it was soon found that visiting nurses were being sent out unnecessarily—a waste that could not be permitted at such a time. This Bureau proved of the greatest value not only in hastening relief to those who needed it, but also in preventing the confusion sure to result from calls at wrong places. As a natural sequence of its work in preparing district maps for the Child Welfare Committee the Federation was asked to prepare a large wall map showing the location of hospitals, police stations, etc., which enabled the workers at the telephones of the Information Bureau to tell at a glance which was most accessible to the person calling for assistance. It was also asked to prepare a similar map for the Emergency Aid and the Settlements who established food stations in different parts of the city.

Later when it became evident that the undertakers and the city were unable to cope with the problem of caring for the bodies of victims or even removing them from their homes, representatives of the Child Welfare Committee organized a service for the removal and disposal of bodies which in two or three days solved the problem.

These emergency services are not within the usual province of a Child Welfare Committee or of the Child Federation, but are quoted only to show the flexibility and possibilities for emergency work to which a well developed spirit of co-operation leads.

Some Other Work. The above is a general statement of the present work and methods of the Child Federation. It leaves out of account the great amount of detail labor that has gone into such things as maps, which show graphically and convincingly the present overlapping of agencies, the arguments and plans made to end this overlapping. It even omits mention of the Federation's part in a study of milk distribution made by the Milk Committee of the Food Administration. This committee too is composed of representatives of several agencies, as the Society for Organizing Charity, the Visiting Nurse Society, the Hospital Social Service and others which have a large number of visitors. They filled out the questionnaires which the Child Federation then tabulated, a piece of work that took several weeks and necessitated the employment of an additional member of the office force.

JOHN IHLDER, *Managing Director*

THE STARR CENTRE ASSOCIATION

Philadelphia

II. Organized 1897.

IV. Staff: Nurses, 3; doctors, 2.

All of our doctors are paid for their services.

We have not used nurses' aides or volunteers.

V. As a result of the advance in wages, living conditions have improved in a number of families with which our Association is in touch.

Approximately 95 per cent of our people are Italians.

VI. Amount of milk bought for babies and children has decreased.

VII. As a war measure we are doing more intensive work along prenatal and obstetrical lines. Very few of our mothers are engaged in gainful occupations outside of their own homes.

X. Total budget for current fiscal year, \$22,600, for all branches. The Association is supported by voluntary contributions. We send out monthly appeals to selected lists.

All of the work of our Association has been free of charge.

XI. We co-operate with local organizations and with the Division of Child Hygiene of the City Department of Health.

We have a Division of Child Hygiene in both city and state.

XII. Prenatal Care. Total number of mothers cared for during the year, 180 (110 births).

Average number of months under care, 4.

Total deaths of mothers, 1 (at childbirth).

Total number of infant deaths: At birth, 1 (premature); 3 (abortions). During first month, 3 (premature); 1 (full time).

Women usually come under our care during the fourth month of pregnancy. Earliest case, 6 weeks.

Midwives: 28 per cent of babies on our roll were attended at birth by midwives.

Postnatal:

Age limit of children under our care, 2 years.

Total number under one year cared for, 526.

Total number of infant welfare conferences each week, 6.

Average number of babies in attendance each week, 120.

The youngest baby brought under our care was 10 days old.

ALBERT L. JONES, *General Secretary*

VISITING NURSE ASSOCIATION

York

The greatest increase in our work last year has been from the establishment of prenatal clinics. We have doubled the number of patients on our list over the year preceding. Up to the time we made a survey of the city of York

in this way, there were a great many women who did not know of our existence and did not know of the type of work we were doing. The Red Cross local chapter appropriated funds to pay the salaries of two nurses, thus giving us a large staff which enabled us to cover a larger territory.

NETTA FORD, R. N., *Superintendent of Nurses*

RHODE ISLAND

THE BABY WELFARE COMMITTEE

Providence

The Baby Welfare Committee of Providence was organized in 1914 and at that time was made up of representatives from all organizations supporting infant welfare stations in the city, together with the doctors and nurses on their staff.

In 1917, the constitution was amended and representatives from any organization doing infant welfare work were made eligible to membership, and several such representatives have from time to time been elected. At present twelve organizations are represented on the Committee.

The principal work of the Committee consists in discussing problems relating to Infant Welfare Stations such as change in location of stations, changes in day or time of holding the baby consultations and formulating rules and regulations for the guidance of staff doctors and nurses.

Other matters relating to infant welfare work are also brought up at the meetings by the representatives of the various organizations, and during the past year "milk," "prenatal work," "day nursery situations," and "floating hospital plans" have been more or less fully discussed.

Six Infant Welfare Stations are now in operation in Providence, each having its weekly weighing day for the babies of the district, and offering through its doctor and nurse, advice to the mothers.

Following a request of the Committee to the Superintendent of Health, the names of the six doctors in attendance at the Infant Welfare Stations have been put on the payroll of the Health Department and now receive two dollars for each consultation attended.

All the Baby Welfare Stations were used during the summer as centres for weighing and measuring babies and children of the various districts, the committee thus co-operating in carrying out the request of the Federal Children's Bureau.

Owing to the war, several changes have been made in the staff of both doctors and nurses, several having entered active service in army, navy, or Red Cross. But their places have been filled by other doctors and nurses.

Since the nurses in attendance at the Infant Welfare Stations are on the staff of the Providence District Nursing Association topics III. to XIII. will be covered by that organization.

HENRY E. UTTER, M. D., *Chairman.*
(MRS. G. T.) VESTA N. T. TEEHAN,
Secretary and Treasurer

DISTRICT NURSING ASSOCIATION

Providence

The children's work of the Providence District Nursing Association has been carried on the past year as formerly with a staff of eleven nurses. Two of the regular children's nurses have gone into war service, and these were replaced by substitutes.

III. Our greatest problem has been the increase in the number of women who have gone into industry, which necessitated the children being cared for

by neighbor, relatives and at day nurseries. It also meant that less cooking was done in the homes. Despite this condition there has been less illness among the babies and older children.

VIII. The nurses assisted in weighing and measuring 7,788 children in co-operation with the Children's Year Campaign.

IX. All children from birth to school age are supervised by the nurses.

X. The Association is supported by voluntary contributions, an annual Tag Day, contributions from patients, Metropolitan Life Insurance Company and an annual appropriation from the city of \$5,000.00.

If a family can pay for the nurse's visit they are asked to do so.

XI. We have very strong co-operation with all other organizations in Providence and especially good co-operation with the Boards of Health and the City Division of Child Hygiene.

XII. The births in Providence for the year ending Dec. 31, 1917, were 6,391 and the total deaths for the same year were 653 or a death rate of 102 which was a decrease from last year of 7 per thousand.

WINIFRED L. FITZPATRICK, R. N., *Assistant Superintendent*

TEXAS

INFANTS' WELFARE AND MILK ASSOCIATION

Dallas

Dallas has two infant welfare stations, and we hope that the City Health Department will take them over and give us others. The Mother's Council of National Defense for infant welfare work, has put in two nurses' auxiliaries of their own and hope to give them full sway. The Infant Milk Welfare Association has two nurses, one in the cotton mill district, and the other in the foreign district, where there are Russians, Mexicans and Poles. We have two clinics a week at both stations and follow up the work with physicians' directions. We give away about three thousand pints of milk a month to the different districts.

HELEN PALMERTON, R. N., *Nurse-in-Charge*

WISCONSIN

CHILD WELFARE DIVISION, HEALTH DEPARTMENT

Milwaukee

II. Organized June 27, 1912.

III. Our most difficult problem during the past year has been shortage of nurses.

As a result of war conditions we have taken up community nursing.

IV. Staff: Nurses, 18; doctors, 18 (only 1 paid for his services).

Thirteen of our nurses went into war service. We engaged retired nurses to replace them. We have used nurses' aides or volunteers to do follow-up work.

V. There has been less illness and better housing conditions in the families with which our organization has been in touch, as a result of the general advance in wages. There has been a decrease in infant mortality among the colored families. We have been in touch with German, Austrian, Bohemian, Russian, Slavonian, and Irish mothers.

VI. The amount of milk bought for babies has increased.

VII. As a war measure we have increased the number of nurses. About 265 of the mothers reached by our organizations are engaged in gainful occupations outside of their own homes. This is about 5 per cent of the total number of mothers cared for, an increase over the number normally so employed. We have provided Day Nurseries for the children of these mothers.

VIII. Children's Year Campaign. We are conducting examinations of babies and follow-up work of all abnormal and sickly children.

IX. We give nursing and medical care to children of pre-school age.

X. Total budget for current fiscal year, \$21,780.

Our organization is supported by public funds, and an appropriation from the city.

The work is given free of charge.

The mothers whose financial circumstances have been improved by the advance in wages, continue to attend our conferences and ask our advice.

XI. We co-operate with all local and national organizations, with Bureaus and Departments of the Federal Government and with the City Department of Health. We have a Division of Child Hygiene in both the city and state Department of Health.

XII. Prenatal Care:

Total number of mothers cared for during the year, 212.

Average number of months under care, 5.

Total number of infant deaths:

At birth, 377.

During first year of life, 1,092.

Women generally come under our care during the sixth month of pregnancy, but we have had cases as early as the third month.

Midwives:

Approximately 29 per cent of the births in our city were attended by midwives.

25 per cent of babies on our roll were attended at birth by midwives.

Postnatal:

Age limit of babies under care, 7 years.

Total number under one year cared for, 4,255.

Total number between 1 and 5 years cared for, 8,968.

Total number of infant welfare conferences each week, 5.

Average number of babies in attendance each week, 20.

The average age at which the child is brought under our care is 6 weeks, but we have had a case as early as the second week.

30 per cent of the babies born during the past year came under the supervision of our organization.

Total births for year ending Dec. 31, 1917, 11,555.

Total deaths under 1 year for year ending Dec. 31, 1917, 1,104.

90 per cent of the deaths under one year were not on the rolls of our organization.

E. T. LOBEDAN, M. D., *Chief*

Milwaukee Infants' Hospital
Milwaukee

As a result of war conditions, the hospital work was somewhat crippled during the last year.

Ordinarily we have seven doctors, four graduate nurses, and from twelve to fourteen young women in the training school for nursery maids.

All the physicians on the hospital dispensary and laboratory staffs were called into Government service. Other physicians in the city (though already overburdened with work) gladly gave us their services when needed.

When the new hospital was finished the old building was turned into a nurses' home so that we were equipped to give a post graduate course to nurses who wished to specialize in the care of sick infants. So far we have not succeeded in this department, as most of our younger nurses joined the Red Cross and were taken into army service.

We have always had a long waiting list of applicants for the training school for nursery maids. This year it was almost impossible to get any.

While it has been a year of discouraging experiences, the work which was accomplished was on the whole gratifying.

There were 240 babies treated in the hospital.

Our social nurse reports 190 babies under her supervision; 291 consultations for mothers in the out-patient department, and 1,180 visits to homes.

While the hospital has in the past given medical care and nursing to hundreds of babies and has saved many lives, we feel that we accomplished comparatively little until we began to follow up the patients systematically in their homes.

Our social nurse, who has had special training in the nursing of children and in public health service, is particularly adapted to this work. She goes into the home before the patient is discharged from the hospital, advises the mother and helps her as far as possible to provide for the needs of the baby when it goes home. When the child leaves the hospital the mother is given sufficient food for the next twenty-four hours, so that there can be no excuse for change of diet. The following morning the nurse instructs the mother how to bathe and dress the baby, take care of its bed, clothing, etc. She teaches her to prepare the food and gives her instructions as to the methods used in the hospital, emphasizing the need for absolute cleanliness, fresh air and sunshine. This has to be done in many cases for several successive mornings, depending on the intelligence of the mother. She is requested to report at the out-patient department of the hospital on certain days when the attending physician examines and weighs the child, changes the diet when necessary and gives the mother any advice that is essential to the well-being of herself and child, thus carrying on the work which was begun in the hospital. During the nurse's visits to the homes, she has an opportunity of supervising the hygiene and food of the other children (if there are any) under school age, referring them, when necessary, to other hospitals or dispensaries for treatment. She also gets in touch with the pregnant mother and sees that she is placed under the observation of a maternity hospital or obstetrician during pregnancy.

During the past year one nurse has had under supervision 150 babies with only two deaths. Three children through lack of co-operation of the mothers were returned to the hospital for further care. This speaks for the vital importance of follow-up work in babies' hospitals.

I shall relate one case out of several to prove what can be done to save babies. A mother gave birth to premature twins, one weighing one and one-half pounds, the other two and one-half pounds. This woman felt it was impossible for her to care for them, so, of course, called on the hospital to admit them. Our nurse went in and encouraged her to keep them home and nurse them. When the mother was on her feet, she was taught how to bathe and dress them, to nurse them regularly, give them fresh air, etc. The result is that these little ones now ten months old are perfectly healthy, normal children. It required a vast amount of patience and perseverance on the part of both mother and nurse, but they were more than repaid.

We now co-operate with Marquette Dispensary, where we are assured that the mothers will get sufficient and suitable care before and during childbirth. The baby's birth will be reported to us, so that it will be placed immediately under the supervision of a pediatrician.

NAN DINNEEN, R. N., *Superintendent*

THE WISCONSIN ANTI-TUBERCULOSIS ASSOCIATION
(Headquarters) Milwaukee

Because the Wisconsin Anti-Tuberculosis Association neither does case work with families nor devotes itself in particular to infant welfare work, difficulty is experienced in attempting to make a report from the questions in the sug-

gested outline. Though the Association was originated as an anti-tuberculosis society, the organizers soon realized that all branches of public health are inter-related. Hence, participation in projects for the promotion of infant welfare has been part of the general health program of the Association.

It is the practise of the Association to send nurses to communities throughout the state for short time "demonstrations" of the value of nursing service. While in these communities, the nurses have done infant welfare work in connection with general health work, have helped to conduct "baby weeks," and have paved the way for the employment of permanent nurses who, of course, continue the infant welfare work. Through the nursing department, also, the Association has conducted an employment bureau in the interests of both nurses and communities, and has fostered the demand for public health nurses throughout the state.

For two years, the Association has conducted courses in public health nursing for graduate nurses. To meet war demands, senior students from accredited training schools are now admitted to these courses. This fall, a course for a new kind of worker who is something between a nurse and a teacher has been inaugurated.

In connection with the Red Cross Institutes for Home Service workers, we have had under our supervision, the women who were interested in doing volunteer work with health agencies. These women have assisted in the Children's Year Campaign.

The Infant Welfare Committee of the Association, composed of several of the most prominent baby specialists in Wisconsin, has prepared a set of Infant Feeding Charts which have been distributed in connection with baby weeks, and by nurses and other agencies.

Material of interest to infant welfare workers appears constantly in our publication, "The Crusader." In particular, the April, 1918, number was devoted to children and infants.

A bulletin containing suggestions of interest to public health nurses is distributed through the state from time to time.

Photographs of an especially effective baby week exhibit which is easily prepared have been circulated to various communities through the Association.

We have co-operated in preparing survey schedules for a sanitary survey now being conducted by the State Council of Defense through women's committees of county councils.

A number of press bulletins on infant welfare have been sent out by Dr. Deartholt through the Health Instruction Bureau of the Extension Division of the University of Wisconsin. These bulletins go to practically all of the newspapers in the state.

Attached are answers to questions in the suggested outline, in so far as it seemed practicable to follow the outline:

I. Name and address: Wisconsin Anti-Tuberculosis Association, 471 Van Buren Street, Milwaukee, Wisconsin.

II. Organized 1908.

III. Problems rendered acute by war: Difficulty has been experienced in getting nurses.

IV. Medical and nursing staff: There is no "normal" number of members on our nursing staff as we have endeavored to expand this department constantly and to adjust it to meet new needs. We had reached our maximum number of four nurses last spring, when the entire nursing staff left for war work.

We had, until lately, one paid physician on our staff. We have now two full-time physicians and one part-time physician. These are all paid workers. Three physicians do volunteer work as members of our Infant Welfare Com-

mittee. Two of these physicians are now in army service, including Dr. Taylor, the Chairman and moving spirit of the Committee. Five of our nurses have gone into war work.

V, VI. & VII. We do not do case work.

VIII. Nurses who were taking our course in public health nursing helped in the Children's Year Campaign in Milwaukee and in other parts of the state.

IX. We do not do case work.

X. Financial: Our budget for the current year is \$70,000. With the exception of a few minor contributions, the organization is supported entirely by the sale of Red Cross Christmas Seals.

XII. Affiliations: We have co-operated in various projects with the state and with county Councils of Defense. Students in our courses do field work with the Milwaukee Health Department. The Association is closely affiliated with the Extension Division of the University of Wisconsin and co-operates with the Red Cross. There is a Division of Child Hygiene in the City of Milwaukee, but not in the State Board of Health.

HOYT E. DEARHOLT, M. D., *Executive Secretary*

AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY

(Now the AMERICAN CHILD HYGIENE ASSOCIATION)

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"Friend," Milwaukee
"Friend," Milwaukee
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Babies' Dispensary Guild

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Baby Health Centre, University Settlement
Baby Welfare Stations (English)

Miss Lulu N. Drew

TORONTO
Bureau of Child Welfare, Ontario Provincial Board of Health

Miss Mary Power

California

SAN FRANCISCO
Baby Hygiene Committee, California Association of Collegiate Alumnae

Connecticut

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Child Welfare Department, of the Visiting Nurse Association
WATERBURY
Visiting Nurse Association

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Georgia	
SAVANNAH	
Georgia State Association of Graduate Nurses	
Hawaii	
HONOLULU	
Central Committee on Child Welfare	
District Nursing Department Palama Settlement	
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Mothers' Aid of the Chicago Lying-in Hospital and Dispensary	Mrs. Hugo Hartmann
Woman's Club	
LA SALLE	
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INDIANAPOLIS	
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Iowa	
CEDAR FALLS	
Iowa State Association of Registered Nurses	
Kansas	
WICHITA	
Christian Service League of America	
Kentucky	
LEXINGTON	
Baby Milk Supply Association	
LOUISVILLE	
Babies' Milk Fund Association	
Louisiana	
NEW ORLEANS	
Child Welfare Association	
Maine	
PORTLAND	
Milk and Baby Hygiene Station	Miss Katherine L. Quinn
Maryland	
BALTIMORE	
Council, Milk and Ice Fund	
Maryland Association for Study and Prevention of Infant Mortality (Babies' Milk Fund Association)	Dr. J. H. Mason Knox, Jr.
CUMBERLAND	
Baby Welfare Section of Civic Club	
Massachusetts	
BOSTON	
Baby Hygiene Association	
Children's Aid Association	
Floating Hospital	
Committee on Prenatal and Obstetrical Care, Women's Municipal League	Mrs. Wm. Lowell Putnam
Instructive District Nursing Assn.	
Massachusetts Milk Consumers' Association	Mrs. Wm. Lowell Putnam
Massachusetts Society for the Prevention of Cruelty to Children	
Massachusetts State Department of Health	Dr. Eugene R. Kelley
Society for Helping Destitute Mothers and Infants	

BROOKLINE

Infant Welfare Clinic of the Brookline Friendly Society

CAMBRIDGE

Avone Home

GARDNER

Massachusetts Branch Nat. Congress of Mothers and Parent-Teacher Association

GREAT BARRINGTON

Visiting Nurse Association

HOLYOKE

Infant Hygiene Association

LEXINGTON

Unity Lend-a-Hand Society

SPRINGFIELD

Visiting Nurse Association

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Alumnae Association Battle Creek Sanitarium and Hospital Training School for Nurses

Michigan Sanitarium and Benevolent Association

Race Betterment Foundation

DETROIT

Babies' Milk Fund

Children's Free Hospital Association

Farrand Training School Alumnae Association

Visiting Nurse Association

GRAND RAPIDS

Clinic for Infant Feeding

PETOSKEY

Michigan State Nurses' Association

ST. JOSEPH

Michigan Children's Home Society

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Miss Margaret Roche

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Infant Welfare Department, Duluth Consistory Scottish Rite Masons

MINNEAPOLIS

Colonial Chapter, D. A. R.

Infant Welfare Society

Woman's Club

ST. PAUL

Baby Welfare Association

Minnesota Public Health Association

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Miss Agnes Carter

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Children's Hospital

Missouri State Nurses' Association

Visiting Nurse Association

Montana**HELENA**

Montana State Association of Graduate Nurses

New Hampshire**BERLIN**

Berlin Mills Company's District Nurse

MANCHESTER

Infant Aid Association

New Jersey**ATLANTIC CITY**

Child Federation

EAST ORANGE

Free Public Library

ELIZABETH

Visiting Nurse Association

HADDONFIELD

New Jersey Congress of Mothers

JERSEY CITY

Division of Child Hygiene, Health Bureau

MONTCLAIR

Board of Health

NEWARK

Babies' Hospital

ORANGE

Diet Kitchen of the Oranges

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Infants' and Child's Welfare League

BATAVIA

Child Welfare Association

BROOKLYN

Bureau of Charities District Nursing Committee

Children's Aid Society

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Babies' Dairy Association

Babies' Hospital

Babies' Welfare Association

Berwind Free Maternity Clinic

Children's Welfare Division, Bellevue Hospital Social

Service Department

Henry Street Settlement

Jacobi Hospital for Children

Metropolitan Life Ins. Co., Industrial Department

National Committee for the Prevention of Blindness

National League of Nursing Education

National Organization for Public Health Nursing

New York Association for Improving Condition of the

Poor

New York Diet Kitchen Association

New York Milk Committee

New York State Charities Aid Association, Sub-Com-

mittee on Mothers and Infants

RIVERDALE-ON-HUDSON

Health League

ROCHESTER

Bureau of Health

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Miss Mary Arnold

Miss E. M. Whiting

Miss Katherine Olmsted

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State Board of Health

Dr. W. S. Rankin

Ohio**CINCINNATI**

Children's Clinic of the Ohio-Miami Medical College

Jewish Infant Welfare Circle

Protestant Home for the Friendless and Foundlings

Visiting Nurse Association

CLEVELAND

Babies' Dispensary and Hospital

Board of Health

Day Nursery and Free Kindergarten Association

Graduate Nurses' Association

Visiting Nurse Association

COLUMBUS

Instructive District Nursing Association

Ohio State Association of Graduate Nurses

TOLEDO

District Nursing Association

Miss Margaret Hope

Dr. H. J. Gerstenberger

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Visiting Nurse Association			
BRYN MAWR		Pennsylvania	
Bryn Mawr College Library			
PHILADELPHIA			
Association of Day Nurseries			
Babies' Hospital			Miss Rena P. Fox
Babies' Welfare Association			
Child Federation			Dr. S. McC. Hamill
Pediatric Society			
Starr Centre Association			
READING			
Visiting Nurse Association			
YORK			
Visiting Nurse Association			Miss Netta Ford
MANILA		Philippine Islands	
Liga Nacional para la Proteccion de la Primera Infancia			
PROVIDENCE		Rhode Island	
Child Welfare Department, R. I. Congress of Mothers and Parent-Teacher Association			
District Nursing Association			Miss Alice Hall
WASHINGTON			
R. I. State Federation of Women's Clubs			
DALLAS		Texas	
Civic Federation			
Infants' Welfare and Milk Association, Station No. 1			Mrs. Helen Palmerton
SALT LAKE CITY		Utah	
Ladies' Literary Club			
NORFOLK		Virginia	
Kings Daughters Visiting Nurses' Association			
RICHMOND			
State Department of Health			
SEATTLE		Washington	
Child Study Department of the Woman's Century Club			
Health Department			
BELOIT		Wisconsin	
Visiting Nurse Association			
MILWAUKEE			
Children's Free Hospital			
Infants' Hospital			Miss Nan Dinneen
Milwaukee Maternity Hospital and Free Dispensary Association			
Wisconsin Branch, National Congress of Mothers and Parent-Teacher Association			

GENERAL MEMBERSHIP**England**

Lane-Claypon, Dr. Janet, Dean, King's College for Women.....London

New Zealand

Jenkins, Mr. William850 Cumberland St., Dunedin

Hawaii

Central Com. on Child Welfare (Affil.).....2539 Liliha St., Honolulu
 District Nursing Dept., Palama Settlement
 (Affil.).....King & Liliha Sts., Box 514, Honolulu
 Frear, Mrs. Walter.....1434 Punahon St., Honolulu
 Jackson, Dr. Arthur F.....490 Beretania St., Honolulu
 Pratt, Dr. John S. B.....P. O. Box 686, Honolulu

Panama

Brakemeier, Miss Louise, Directress of Baby
 Welfare Work, National Red Cross of
 PanamaPanama

Philippine Islands

Liga Nacional Filipina para la Proteccion
 de la Primera Infancia (Affil.).....851 Lepanto, Sampaloc, Manila

Canada

Babies' Dispensary Guild (Affil.).....12 Euclid Ave., Hamilton
 Baby Health Centre, University Settlement
 of Montreal (Affil.).....179 Dorchester St., W. Montreal
 Baby Welfare Stations (English) (Affil.).....249 Prince Arthur St., W., Montreal
 Banks, Mr. William.....70 Dewson St., Toronto
 Boucher, Dr. S., Medical Officer of Health.....Montreal
 Brown, Dr. Alan.....440 Avenue Road, Toronto
 Bureau of Child Welfare, Ontario Provin-
 cial Board of Health (Affil.).....Toronto
 Chipman, Dr. W. W.....285 Mountain St., Montreal
 McCullough, Dr. John W., Sec'y. Prov. Board
 of Health.....Toronto
 MacMurphy, Dr. Helen, The Inspector of
 Feeble-MindedParliament Bldg., Toronto
 Mullin, Dr. R. H., Vancouver General Hos-
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 Prov. of Quebec.....Montreal

Arizona

Walton, Miss Carol F., Exec. Sec'y., Arizona
 Anti-Tuberculosis Assn.....219 Goodrich Bldg., Phoenix

Arkansas

Niehuss, Dr. H. H.....El Dorado

California

Ainley, Dr. Frank C.....1118 Brockman Bldg., Los Angeles
 Ash, Dr. Rachel L.....Galen Bldg., San Francisco
 Baby Hygiene Committee, Cal. Assn. of Col-
 legiate Alumnae (Affil.).....San Francisco
 Baldwin, Mr. Alex. R.....932 Mills Bldg., San Francisco
 Bentley, Mrs. Chas. H.....3198 Pacific Ave., San Francisco
 Breed, Miss Josephine L., R. N.....1441 Avon Park Ter., Los Angeles
 Brown, Dr. Adelaide.....240 Stockton St., San Francisco
 Carter, Dr. C. Edgerton.....Brockman Bldg., Los Angeles
 Fleischner, Dr. E. C.....350 Post St., San Francisco
 Goethe, Mr. C. M.....Nicolaus Bldg., Sacramento
 Goodrich, Mrs. Chauncey S.....1840 Broadway, San Francisco
 Gray, Mr. R. S.....153 Kearney St., San Francisco
 Haynes, Dr. John R.....429 Cons. Realty Bldg., Los Angeles
 Hoyt, Mr. Robert N., State Health Officer,
 Central Coast Director.....City Hall, San Jose
 King, Dr. Charles Lee.....70 S. Euclid Ave., Pasadena
 Lewitt, Dr. Wm. B.....210 Post St., San Francisco
 Lucas, Dr. Wm. Palmer, University of Cali-
 fornia Medical School.....2nd & Parnassus Aves., San Francisco
 McCleave, Dr. Thomas C.....2844 Garber St., Berkeley

McIntosh, Mrs. C. K.	Redwood City
Mainwaring, Dr. W. H.	Stanford University, Palo Alto
Niebel, Mrs. H. L.	1106 Bryant St., Palo Alto
Porter, Dr. Langley	240 Stockton St., San Francisco
Powers, Dr. L. M. Commissioner of Health	Los Angeles
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Sawyer, Dr. Wilbur A.	3122 T St., Sacramento
Smith, Dr. Dudley	Hotel Oakland, Oakland
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Arneille, Mrs. James Rae	1055 Penna. St., Denver
Gengenbach, Dr. Frank P.	906 Metropolitan Bldg., Denver
Gilman, Mr. Arthur E.	University of Colorado, Boulder
Mackay, Miss Mary A., R. N., Supt. Visiting Nurse Assn.	536 Temple Court, Denver

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Bennett, Mrs. Winchester	76 Everitt St., New Haven
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Bronson, Miss J. C.	438 Whitney Ave., New Haven
Bronson, Miss Margaret L.	438 Whitney Ave., New Haven
Brown, Dr. Walter H., Health Officer	886 Main St., Bridgeport
Carmalt, Dr. W. H.	261 St. Ronan St., New Haven
Child Welfare Dept. of the New Haven Visiting Nurse Assn. (Affil.)	200 Orange St., New Haven
Darrach, Dr. Wm.	R. F. D. 28½ Cos Cob
Farnam, Mr. Henry W.	43 Hillhouse Ave., New Haven
Fisher, Prof. & Mrs. Irving	460 Prospect St., New Haven
Goodenough, Dr. E. W.	44 Leavenworth St., Waterbury
Goodrich, Dr. Chas. A.	5 Haynes St., Hartford
Gregory, Mrs. A. W.	235 Girard Ave., Hartford
Linde, Dr. Joseph I.	163 York St., New Haven
Locke, Dr. H. L. F., Supt. Hartford Isolation Hospital	Hartford
Mead, Dr. Kate C.	165 Broad St., Middletown
Platt, Mrs. Orville H.	Washington
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Steele, Dr. H. Merriman	226 Church St., New Haven
Steiner, Dr. W. R.	646 Asylum, Hartford
Visiting Nurse Assn. (Affil.)	37 Central Ave., Waterbury
Winslow, Prof. C.-E. A.	Yale Medical School, New Haven

Delaware

Wales, Dr. Joseph P.	1900 Woodlawn Ave., Wilmington
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District of Columbia

Alsberg, Dr. Carl L.	3443 14th St., N. W., Washington
Babbitt, Miss Ellen C.	1666 Park Rd., Washington
Baldwin, Mr. Wm. H.	1415 21st St., Washington
Bradley, Dr. Frances Sage	% Children's Bureau, Washington
Columbia & Children's Alumnae Assn. (Affil.)	1337 K St., N. W., Washington
Davis, Dr. Wm. H., Chief Statistician for Vital Statistics, Bureau of Census	Washington
Flannery, Mrs. John S.	2411 California St., Washington
Gardner, Miss Helen W., R. N.	2 Dupont Circle, Washington
Goodwin, Mrs. Etta R., War Trade Board	1435 K St., N. W., Washington
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Heurich, Mrs. Christian	1307 N. E. Ave., Washington
Instructive Visiting Nurse Society (Affil.)	2506 K St., N. W., Washington
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Kober, Dr. George M.	1819 Q St., N. W., Washington
La Forge, Miss Zoe	Children's Bureau, Washington

Lappin, Mr. Richard C., Div. of Vital Statistics, Bureau of the Census.....	Washington
Lathrop, Miss Julia C., Chief, Children's Bureau	Washington
Lewis, Mrs. Fulton.....	1669 31st St., Washington
Merrill, Dr. Theodore C.....	Rm. 509, Bu. of Chem., Washington
Moran, Dr. John F.....	2426 Penna. Ave., N. W., Washington
Overton, Mrs. W. S.....	2 Dupont Circle, Washington
Perkins, Miss Charlotte E., Home for Incurables	S and 32nd Sts., Washington
Rude, Dr. Anna E.....	Children's Bureau, Washington
Saville, Miss Catherine.....	1420 17th St., N. W., Washington
Schereschewsky, Dr. J. W., U. S. Public Health Service	Washington
Wall, Dr. Joseph S.....	2017 Columbia Rd., Washington
Washington Diet Kitchen Assn. (Affil.).....	1333 G St., N. W., Washington
West, Mrs. Max.....	Children's Bureau, Washington
Wheeler, Miss Estelle L., Supt. Washington Diet Kitchen Assn.....	1333 G St., N. W., Washington
Willson, Dr. Prentiss.....	Stoneleigh Court, Washington

Florida

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Georgia

Georgia State Assn. of Graduate Nurses (Affil.)	Savannah
Mulherin, Dr. Wm. A.....	1203 Greene St., Augusta
Rhodes, Dr. C. A.....	Atlanta
Waring, Dr. A. J.....	3 Perry St., W. Savannah

Illinois

Abt, Dr. Isaac A.....	4810 Kenwood Ave., Chicago
Ahrens, Miss Minnie H., Supt. Infant Welfare Society	104 S. Michigan Ave., Chicago
Armstrong, Dr. Edward K.....	5501 Prairie Ave., Chicago
Bailey, Mr. E. P.....	Chicago Savings Bank & Trust Co.
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Chicago Woman's Club (Affil.).....	410 S. Michigan Ave., Chicago
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Drake, Dr. C. St. Clair, Sec'y. State Board of Health	Springfield
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Ewans, Dr. W. A.....	% The Chicago Tribune, Chicago
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Hedger, Dr. Caroline.....	29 E. Madison St., Chicago
Helmholz, Dr. Henry F.....	800 Davis St., Evanston
Hess, Dr. Julius H.....	5574 Indiana Ave., Chicago
Heyworth, Mrs. James O.....	Lake Forest
Hilton, Mr. Henry H.....	2301 Prairie Ave., Chicago
Hoffmann, Dr. W. H.....	114 E. Walter Place, Chicago
Houghteling, Mrs. James L.....	Winnetka
Ide, Mrs. Francis P.....	1515 N. Third St., Springfield
Infant Welfare Society (Affil.)	104 S. Michigan Ave., Chicago
Jordan, Prof. Edwin O.....	University of Chicago, Chicago
La Salle Infant Welfare Station (Affil.).....	La Salle
McCormick, Mr. Harold F.....	Stock Exchange Bldg., Chicago
McCormick, Mrs. Harriet H.....	50 E. Huron St., Chicago
McLaury, Mrs. C. W.....	4301 Greenwood Ave., Chicago
Meyer, Mr. Alfred C.....	843 W. Adams St., Chicago
Michael, Dr. May.....	4744 Prairie Ave., Chicago
Milligan, Dr. Josephine.....	610 W. State St., Jacksonville
Monroe, Mrs. Wm. S.....	64 E. Elm St., Chicago

Moore, Miss Elizabeth, Children's Bureau...Dearborn & Harrison Sts., Chicago
 Mothers' Aid of the Chicago Lying-in Hos-
 pital & Dispensary (Affil.).....Chicago
 Perkins, Mrs. H. F.....1301 Astor St., Chicago
 Poole, Mrs. Ralph H.....Elsinore, Lake Forest
 Rosenwald, Mr. Julius.....% Sears, Roebuck & Co., Chicago
 Scott, Mrs. Frederick H.....175 Sheridan Rd., Hubbard Woods
 Scott, Mrs. Robert L.....144 Greenwood Blvd., Evanston
 Shaw, Mrs. Howard Van Doran.....1130 Lake Shore Drive, Chicago
 Skarstedt, Mr. Marcus, Librarian, Evanston,
 Public Library.....Evanston
 Stulik, Dr. Charles K.....1658 W. 21st St., Chicago
 Taylor, Mr. Graham.....955 Grand Ave., Chicago
 Teter, Mr. Lucius.....5737 Woodlawn Ave., Chicago
 Towne, Mrs. John D.....1004 Greenwood Blvd., Evanston
 Tyson, Mrs. Russell.....20 E. Goethe St., Chicago
 Welles, Mrs. Edward P.....Hinsdale
 Wheeler, Miss Ruth.....Univ. of Illinois, Urbana
 Winterbotham, Mr. John A.....226 S. La Salle St., Chicago

Indiana

Burckhardt, Dr. Louis.....Hume-Mansur Bldg., Indianapolis
 Children's Aid Assn. (Affil.).....62-63 Baldwin Block, Indianapolis
 Hurty, Dr. J. N., Sec'y. State Board of
 Health.....Indianapolis
 Rappaport, Mr. Leo M.....822 Law Bldg, Indianapolis
 Schweitzer, Dr. A. E.....Children's Bureau, Gary
 Trimble, Mrs. Mary C., Supervisor Babies
 Milk Fund Assn.....Apt. M., The Deakin, Evansville

Iowa

Byfield, Dr. Albert H., State University of
 Iowa.....Iowa City
 Iowa State Assn. of Registered Nurses
 (Affil.).....Cedar Falls
 Perkins, Mrs. M. Russell.....Burlington
 Sinclair, Miss Amy.....800 Second Ave., Cedar Rapids

Kansas

Abbey, Dr. Frank L.....Newton
 Cretcher, Miss Martha C.....Scott City
 Christian Service League of America (Affil.)...113 N. Lawrence Ave., Wichita
 Knowlton, Captain Millard, State Board of
 Health.....Topeka
 Thomas, Mrs. Charles B.....913 Polk St., Topeka

Kentucky

Babies' Milk Fund Assn. (Affil.).....215 E. Walnut St., Louisville
 Baby's Milk Supply Assn. (Affil.).....Lexington
 Belknap, Dr. Philip F.....Louisville
 Belknap, Mrs. Morris B.....R. R. No. 1, Box 57 G, Louisville
 Fulton, Dr. Gavin S.....600 Atherton Bldg., Louisville
 Haggin, Mrs. Louis Lee.....Mt. Brilliant Farm, Lexington
 Jackson, Miss Mary Trigg, R. N.....Jenkins
 Morrison, Dr. J. Rowan.....Weissinger-Gaubert Bldg, Louisville
 Morton, Mrs. David.....Glenview, Jefferson Co., Louisville
 Shaver, Miss Elisabeth, Supervisor, Babies'
 Milk Fund Assn.....215 E. Walnut St., Louisville
 Smith, Mrs. Letchworth.....R. F. D. No. 1, Louisville

Louisiana

Behre, Mr. Charles H.....1561 St. Louis St., New Orleans
 Bohne, Dr. Philip W.....620 Maison Blanche Bldg., N. Orleans
 Butterworth, Dr. W. W.....Tulane University, New Orleans
 Casanas, Mr. B. C.....201 Tchoupitoulas St., New Orleans
 Child Welfare Assn. (Affil.).....Maison Blanche Bldg., New Orleans
 Denegre, Mrs. George.....Prytania & Eight Sts., New Orleans
 DeBuys, Dr. L. R.....Maison Blanche Bldg., New Orleans
 Gwinn, Mr. J. M., Supt. of Public Schools.....Municipal Bldg., New Orleans
 Henry, Mr. Burt W.....Weis Bldg., New Orleans

Hyman, Mrs. Harris.....	4305 St. Charles Ave., New Orleans
Kearny, Mr. E. Newton.....	520 St. Peter St., New Orleans
Loeber, Dr. Maud.....	2315 Carondelet St., New Orleans
Mayo, Dr. Sara T.....	Machine Bldg., New Orleans
Moses, Mr. Phineas.....	Canal St., New Orleans
Newman, Dr. J. W.....	3512 St. Charles Ave., New Orleans
Polack, Mr. Robert.....	6315 St. Charles Ave., New Orleans
Rolley, Miss Mary L., Director, Child Welfare Assn.....	Maison Blanche Bldg., New Orleans
Robin, Dr. W. H., Supt. of Public Health.....	New Orleans
Signorelli, Dr. J.....	Medical Bldg., New Orleans
Wymer, Mr. Jos. J.....	1115 Maison Blanche Bldg., N. Orleans

Maine

Portland Milk & Baby Hygiene Station (Affil.).....	Room 2D, City Bldg., Portland
Webster, Dr. F. P.....	Y. M. C. A. Bldg., Portland

Maryland

Abercrombie, Dr. Ronald T.....	The Homewood Apts., Baltimore
Athey, Mrs. C. N.....	100 S. Patterson Pk. Ave., Baltimore
Baby Welfare Section of Civic Club of Cumberland (Affil.).....	Cumberland
Barker, Mrs. L. F.....	Stratford Rd., Guilford
Beitler, Dr. F. V., Chief, Bureau of Vital Statistics, State Dept. of Health.....	Baltimore
Belt, Mrs. W. H. G.....	613 Reservoir St., Baltimore
Birkhead, Rev. Dr. Hugh.....	18 W. Read St., Baltimore
Bliss, Mrs. Wm. J. A.....	1017 St. Paul St., Baltimore
Bonaparte, Mr. Charles J.....	Center & Park Ave., Baltimore
Bowdoin, Mrs. W. G.....	1106 N. Charles St., Baltimore
Brack, Dr. Charles E.....	500 E. 20th St., Baltimore
Buck, Mrs. R. B.....	1223 St. Paul St., Baltimore
Carman, Dr. R. P.....	1701 N. Caroline St., Baltimore
Cone, Dr. Claribel.....	The Marlborough, Baltimore
Cook, Mrs. George Hamilton.....	1001 St. Paul St., Baltimore
Corkran, Mrs. Benj. W.....	200 Goodwood Gardens, Roland Park
Council, Milk & Ice Fund (Affil.).....	Baltimore
Davis, Mrs. John Staige.....	1200 Cathedral St., Baltimore
Dobbin, Mrs. Thomas M.....	1308 Bolton St., Baltimore
Ellicott, Mrs. Charles.....	Meivale
Epstein, Mr. Jacob.....	2532 Eutaw Place, Baltimore
Eichberger, Miss M. F., Supt. Babies' Milk Fund Assn.....	McCoy Hall, Baltimore
Fellis, Dr. R. E.....	3 E. Read St., Baltimore
France, Mrs. J. C.....	219 W. Lanvale St., Baltimore
Friedenwald, Dr. Julius.....	1013 N. Charles St., Baltimore
Fulton, Dr. John S., Sec'y. State Dept. of Health.....	Baltimore
Garrett, Mr. Robert.....	Garrett Bldg., Baltimore
Gibbs, Mr. John S., Jr.....	1026 N. Calvert St., Baltimore
Gibbs, Mrs. Rufus M.....	1209 St. Paul St., Baltimore
Greenbaum, Dr. Harry S.....	1614 Eutaw Place, Baltimore
Guggenheimer, Miss Aimee.....	36 Talbot Rd., Windsor Hills, Balto.
Hambleton, Mrs. T. Edward.....	Lutherville
Hamburger, Mrs. Louis P.....	1207 Eutaw Pl., Baltimore
Heinemann, Mrs. Milton.....	2220 Eutaw Pl., Baltimore
Hendley, Mrs. Charles W.....	Greenway, W. Chancote Rd., Guilford
Hochschild, Mrs. Max.....	1922 Eutaw Pl., Baltimore
Hooker, Dr. Donald R.....	Upland, Roland Park
Hooper, Mrs. Jas. H.....	St. Paul & 23rd Sts., Baltimore
Howland, Dr. John.....	Johns Hopkins Hospital, Baltimore
Hunner, Dr. Guy L.....	2305 St. Paul St., Baltimore
Hutzler, Mrs. Albert D.....	Carroll & Delaware Rds., Baltimore
Hutzler, Miss Mabel.....	1801 Eutaw Pl., Baltimore
Jencks, Mrs. Francis M.....	1 W. Mt. Vernon Pl., Baltimore
Katz, Mrs. A. Ray.....	2532 Eutaw Pl., Baltimore
Keyser, Mr. R. Brent.....	912 Keyser Bldg., Baltimore
Knipp, Master, George W.....	Athol Ave., Station D., Baltimore
Knipp, Miss Gertrude B.....	1821 Park Ave., Baltimore
Knipp, Dr. Harry E.....	Fremont & Lanvale Sts., Baltimore
Knox, Dr. J. H. Mason, Jr.....	Severn Apts., Baltimore
Knox, Mrs. J. H. Mason, Jr.....	Wendover Rd., Guilford

Knox, Miss Katherine Bowdoin.....	Wendover Rd., Guilford
Knox, J. H. Mason, 3rd	Wendover Rd., Guilford
Lauer, Mrs. Leon.....	Esplanade Apts., Baltimore
Levering, Mr. Joshua.....	706 Keyser Bldg., Baltimore
Lockwood, Dr. Wm. F.....	8 E. Eager St., Baltimore
McLanahan, Mr. Austin.....	Alex. Brown & Sons, Baltimore
Marburg, Mr. Theodore.....	14 W. Mt. Vernon Pl., Baltimore
Murray, Mrs. Edward.....	Elkridge
Maryland Assn. for Study & Prevention of Infant Mortality (Babies' Milk Fund Assn.) (Affil.)	McCoy Hall, Baltimore
Oliver, Mr. Wm. B.....	Washington Apts., Baltimore
Paine, Mrs. Clinton Paxton.....	1115 St. Paul St., Baltimore
Pleasants, Dr. J. Hall.....	201 Longwood Rd., Roland Pk.
Poultney, Mrs. Wm. D.....	Chattolane
Ramsey, Mr. John B.....	1218 St. Paul St., Baltimore
Roten, Mrs. Adolph.....	2321 Eutaw Pl., Baltimore
Ruhrah, Dr. John.....	Algonquin Apts., Baltimore
Semmes, Mrs. John E.....	10 E. Eager St., Baltimore
Sherwood, Dr. Mary.....	Arundel Apts., Baltimore
Shoemaker, Mr. S. M.....	Eccleston
Sonneborn, Mrs. Sigmund B.....	2420 Eutaw Pl., Baltimore
Thom, Mrs. DeCourcy Wright.....	600 Cathedral St., Baltimore
Tyree, Miss M. Evelyn.....	1039 N. Calvert St., Baltimore
Welch, Dr. Wm. H.....	807 St. Paul St., Baltimore
Welsh, Dr. Lillian.....	The Arundel Apts., Baltimore
White, Mr. Richard J.....	10 South St., Baltimore
Whitridge, Mrs. John.....	Brooklandville P. O.
Whitridge, Mrs. Susan M.....	Guilford
Williams, Dr. J. Whitridge.....	1128 Cathedral St., Baltimore
Wilson, Dr. Karl M.....	23 W. Chase St., Baltimore

Massachusetts

Adriance, Dr. Vanderpoel.....	Williamstown
Allen, Dr. Fred H.....	644 Dwight St., Holyoke
Avon Home (Affil.).....	639 Mass. Ave., Cambridge
Baby Hygiene Assn. (Affil.).....	296 Boylston St., Boston
Beard, Miss Mary, Director, Instructive Dis- trict Nursing Assn.....	561 Mass. Ave., Boston
Besom, Miss Pansy V., R. N., Chief Child Welfare Supervisors, State Dept. of Health	Boston
Blood, Miss Alice P.....	3 Concord Ave., Cambridge
Borden, Mr. Richard P.....	57 N. Main St., Fall River
Boston Children's Aid Society (Affil.).....	43 Hawkins St., Boston
Boston Floating Hospital (Affil.).....	54 Devonshire St., Boston
Bowditch, Dr. Henry I.....	461 Marlboro St., Boston
Brayton, Miss Alice.....	294 Prospect St., Fall River
Broughton, Dr. Arthur N.....	10 Roanoke Ave., Jamaica Plains
Champion, Dr. Merrill E., Director, Division of Child Hygiene, State Dept. of Health.....	Boston
Church, Miss Myra H., City Mission.....	31 Jackson St., Lawrence
Churchill, Dr. F. S.....	17 Canton Ave., Milton
Clark, Mrs. J. D.....	Ashcroft, Sherborn
Codman, Mrs. E. A.....	227 Beacon St., Boston
Committee on Prenatal & Obstetrical Care of the Women's Municipal League (Affil.).....	49 Beacon St., Boston
Dana, Miss Charlotte W., R. N., Supt. Bos- ton Lying-in Hospital.....	24 McLean St., Boston
Davis, Mr. Michael M., Jr.....	25 Bennet St., Boston
DeNormandie, Dr. Robert L.....	357 Marlboro St., Boston
Denny, Dr. Francis P.....	111 High St., Brookline
Dickinson, Miss May B., R. N.....	Trinity Court, Boston
Dodson, Mr. Fred S., Health Officer.....	Framingham
Dunn, Dr. Charles Hunter.....	220 Marlboro St., Boston
Durant, Mrs. Clark T., Pres. Visiting Nurse Assn.....	Great Barrington
Egan, Miss Sarah A., The Floating Hospital.....	54 Devonshire St., Boston
Emerson, Dr. Paul W.....	86 Bay State Rd., Boston
Emerson, Dr. Wm. R. P.....	657 Boylston St., Boston
Emmons, Dr. Arthur B., 2nd.....	Dover
Eustis, Mrs. F. A.....	Canton Ave., Readville
Eustis, Mr. Richard S.....	329 Beacon St., Boston
Fenton, Mr. Henry M.....	27 Kilby St., Boston

Flanagan, Mrs. Jos. F.	Walnut Park, Newton
Forbes, Mrs. Waldo E.	Milton
Frank, Mrs. Bertha B.	65 Maples Rd., Brookline
Grandin, Mrs. J. Livingston, Jr.	54, The Fenway, Boston
Hitchcock, Dr. John S., District Health Officer, State Dept. of Health.	Northampton
Huntington, Dr. James Lincoln.	8 Gloucester St., Boston
Infant Hygiene Assn. (Affil.)	Holyoke
Infant Welfare Clinic of the Brookline Friendly Society (Affil.)	Union Bldg., Brookline
Instructive District Nursing Assn. (Affil.)	561 Mass. Ave., Boston
Irving, Dr. Fred. C.	96 Bay State Rd., Boston
Jackson, Dr. Delbert L.	362 Commonwealth Ave., Boston
Jones, Dr. Lyman A., Northeastern District, State Dept. of Health.	Swampscott
King, Dr. George C.	131 Rock St., Fall River
Lane, Mrs. J. C.	296 Walpole St., Norwood
Lee, Mr. Joseph.	101 Tremont St., Boston
Little, Dr. Abby N.	22 Essex St., Newburyport
Macconachie, Miss Janet, Supt. of Nurses, Taunton State Hospital.	Taunton
Mason, Mr. Charles E.	30 State St., Boston
Mass. Branch Nat. Congress of Mothers & Parent-Teachers Assn. (Affil.)	Gardner
Mass. Milk Consumers' Assn. (Affil.)	49 Beacon St., Boston
Mass. Society for the Prevention of Cruelty to Children (Affil.)	43 Mt. Vernon St., Boston
Mass. State Dept. of Health (Affil.)	Boston
Morse, Dr. John Lovett.	70 Bay State Rd., Boston
Page, Dr. Calvin Gates.	128 Marlboro St., Boston
Percy, Dr. Karlton G.	194 Aspinwall Ave., Brookline
Putnam, Mrs. Wm. Lowell.	49 Beacon St., Boston
Reese, Mrs. D. H.	Uxbridge
Riggs, Dr. Austin Fox.	Stockbridge
Rosenau, Dr. M. J.	Harvard Medical School, Boston
Sanford, Miss Kate I.	Taunton
Sherwood, Miss Margaret P.	Wellesley College, Wellesley
Shuman, Mr. A., Shuman's Corner.	Boston
Smith, Dr. Richard M.	329 Beacon St., Boston
Society for Helping Destitute Mothers & Infants (Affil.)	91 Mt. Vernon St., Boston
Strong, Miss Anne H.	561 Mass. Ave., Boston
Talbot, Dr. Fritz B.	311 Beacon St., Boston
Tinkham, Mr. George H.	11 Pemberton Square, Boston
Torbert, Dr. James R.	252 Marlboro St., Boston
Unity Lend-a-Hand Society (Affil.)	Lexington
Visiting Nurse Assn. (Affil.)	Great Barrington
Visiting Nurse Assn. (Affil.)	613 Main St., Springfield
Warren, Mr. Fiske, Priest Cottage, Harvard.	Worcester Co.
Woodward, Dr. Wm. C., Health Commissioner	Boston
Young, Dr. J. Herbert.	9 Baldwin St., Newton

Michigan

Alumnae Assn. of the Battle Creek Sanitarium & Hospital Training School for Nurses (Affil.)	Battle Creek
Babies' Milk Fund of Detroit (Affil.)	924 Brush St., Detroit
Barnes, Miss Dora M., Univ. of Michigan.	Ann Arbor
Bedinger, Mr. George R., Gen'l. Sec'y. Children's Aid Society.	33 Warren Ave., West, Detroit
Bursley, Mrs. Joseph A.	1402 Hill St., Ann Arbor
Butzel, Mr. Fred.	1012 Union Trust Bldg., Detroit
Children's Free Hospital Assn. (Affil.)	Antoine & Farnsworth Sts. Detroit
Clinic for Infant Feeding (Affil.)	Louis St. & Mkt. Ave., Grand Rapids
Cooley, Dr. Thomas B.	Kresge Medical Bldg., Detroit
Cowie, Dr. D. Murray, Univ. of Michigan.	Ann Arbor
Farrand Training School Alumnae Assn. (Affil.)	Detroit
Fischer, Dr. A. F.	Hancock
Ford, Miss Stella D.	1130 Woodward Ave., Detroit
Freund, Mrs. Hugo A.	26 Chicago Blvd., Detroit
Hoffman, Miss Charlotte, Supt. Out-Patient Dist. Sanitarium	Battle Creek

Holmes, Dr. Arthur D.....	270 Woodward Ave., Detroit
Hoobler, Dr. E. Raymond.....	1563 David-Whitney Bldg., Detroit
Jennings, Dr. Charles G.....	435 Jefferson Ave., Detroit
Johansen, Miss I. C., Visiting Nurse, Mutual Aid & Neighborhood Club.....	Grosse Point Farms
Johnston, Dr. Collins H.....	526 Metz Bldg., Grand Rapids
King, Mrs. Francis.....	Orchard House, Alma
McCool, Mrs. Dantel.....	425 N. Prospect Ave., Grand Rapids
McGregor, Mrs. Tracy.....	239 Brush St., Detroit
Michigan Children's Home Society (Affil.).....	St. Joseph
Michigan Sanitarium & Benevolent Assn. (Affil.).....	Battle Creek
Michigan State Nurses' Assn. (Affil.).....	Petoskey
Nichols, Mrs. J. Brooks.....	225 Larned St., East, Detroit
Parker, Mrs. Walter R.....	285 Seminole Ave., Detroit
Pope, Mrs. Willard.....	37 Putnam Ave., Detroit
Race Betterment Conference (Affil.) % Dr. J. H. Kellogg, Supt., Battle Creek San- itarium.....	Battle Creek
Rosenberger, Mrs. Oscar.....	134 Lathrop Ave., Detroit
Ross, Dr. Worth.....	1249 David-Whitney Bldg., Detroit
Smith, Dr. Richard R.....	Metz Bldg., Grand Rapids
Stevens, Mr. Henry Glover.....	615 Stevens Bldg., Detroit
Visiting Nurse Assn. (Affil.).....	924 Brush St., Detroit
Watkins, Mrs. James K.....	51 Elliot St., Detroit

Minnesota

Adair, Dr. Fred. L.....	730 La Salle Bldg., Minneapolis
Chesley, Dr. A. J., Director, Division of Pre- ventable Diseases, State Board of Health.....	Minneapolis
Christison, Dr. J. T.....	535 Lowry Bldg., St. Paul
Colonial Chapter, D. A. R. (Affil.).....	Minneapolis
Crosby, Miss Caroline M.....	2105 1st Ave. S., Minneapolis
Danielson, Dr. Karl A.....	Litchfield
Doerr, Mrs. George V.....	2611 Euclid Ave., Minneapolis
Greene, Dr. W. P.....	81 Arthur Ave., S. E., Minneapolis
Hagen, Dr. O. J.....	Moorhead
Helm, Mrs. Belle G.....	1819 Girard Ave., Minneapolis
Huenekens, Dr. E. J.....	538 La Salle Bldg., Minneapolis
Infant Welfare Department, Duluth Con- sistory Scottish Rite Masons (Affil.).....	Masonic Temple, Duluth
Infant Welfare Society (Affil.).....	923 Plymouth Bldg., Minneapolis
Jones, Dr. S. S.....	Frazee
Litzenberg, Dr. Jennings C.....	910 Donaldson Bldg., Minneapolis
Mariette, Dr. Ernest S.....	Gem Lake Sanatorium, Hopkins
Minnesota Public Health Assn. (Affil.).....	Old Capitol, St. Paul
Nash, Mr. Willis K.....	928 Plymouth Bldg., Minneapolis
Nelson, Dr. E. H.....	Chislm
Osborn, Dr. Lida.....	Mankato
Rahala, Dr. John.....	Virginia
Ramsay, Dr. Walter R.....	Lowry Annex, St. Paul
Rowe, Dr. Olin Wallace.....	Fidelity Bldg., Duluth
St. Paul Baby Welfare Assn. (Affil.).....	Wilder Bldg., St. Paul
Schlutz, Dr. Fredk. W.....	820 Donaldson Bldg., Minneapolis
Sedgwick, Dr. J. P.....	Univ. of Minnesota, Minneapolis
Sommers, Mrs. H. S.....	794 Linwood Pl., St. Paul
Stowe, Dr. A. J.....	Rush City
Swan, Mrs. James G.....	216 Kenwood Parkway, Minneapolis
Walker, Mrs. Archie D.....	419 Groveland Ave., Minneapolis
Williams, Mrs. Charles R.....	2215 Pillsbury Ave., Minneapolis
Winton, Mr. C. J.....	Securities Bldg., Minneapolis
Woman's Club of Minneapolis (Affil.).....	526 Harmon Pl., Minneapolis

Missouri

Bleyer, Dr. A. S.....	706 N. Kingshighway, St. Louis
Brady, Dr. Jules M.....	1567 Union Ave., St. Louis
Fouke, Mrs. Philip B.....	20 Westmoreland Pl., St. Louis
Lippmann, Dr. Gustave.....	4668 Berlin Ave., St. Louis
Missouri State Nurses' Assn. (Affil.).....	6251 Etzel Ave., St. Louis
Mosher, Dr. George C.....	605 Bryant Bldg., Kansas City
Nagel, Mrs. Charles.....	44 Westmoreland Pl., St. Louis
Neff, Dr. Frank C.....	900 Rialto Bldg., Kansas City
St. Louis Children's Hospital (Affil.).....	St. Louis

Saunders, Dr. Edward W.....1541 S. Grand Ave., St. Louis
 Stanley, Miss Louise.....1215 Hudson Ave., Columbia
 Tuttle, Dr. George M.....4917 Maryland Ave., St. Louis
 Veeder, Dr. Borden S.....608 Humboldt Bldg., St. Louis
 Visiting Nurses' Assn. (Affil.).....Vanol Bldg., St. Louis
 Volker, Mr. Wm.....308 W. 8th St., Kansas City
 Wilhelm, Dr. F. E.....1208 Wyandotte St., Kansas City
 Zahorsky, Dr. John.....4435 N. Pine Blvd., St. Louis

Montana

Dean, Dr. Maria M.....P. O. Box 544, Helena
 Hughes, Miss Margaret M., R.N., Director,
 Child Welfare Division State Board of
 HealthHelena
 Montana State Assn. of Graduate Nurses
 (Affil.)419 N. Ewing St., Helena

Nebraska

McClanahan, Dr. H. M.....468 Brandeis Bldg., Omaha

New Hampshire

Berlin Mills Company's District Nurse
 (Affil.)Berlin
 Infant Aid Assn. (Affil.)1015 Chestnut St., Manchester
 Woods, Prof. Erville B.....Dartmouth College, Hanover

New Jersey

Babies' Hospital (Affil.).....437 High St., Newark
 Ballinger, Mr. J. Dudley, Health Officer.....Orange
 Board of Health (Affil.), Municipal Bldg.....Montclair
 Brown, Mrs. Thacher M., Ballymena.....Red Bank
 Cammann, Mrs. Oswald N.....40 North Ave., Elizabeth
 Child Federation of Atlantic City (Affil.).....224 Guar. Trust Bldg., Atlantic City
 Crum, Mr. Fredk. S.....Prudential Ins. Co., Newark
 Cunningham, Mrs. J. W.....Box 252, West End
 de Forest, Mrs. Henry L.....955 Hillside Ave., Plainfield
 Dennis, Dr. L.....49 Ridge St., Orange
 Diet Kitchen Assn. of the Oranges (Affil.).....124 Essex Ave., Orange
 Division of Child Hygiene, Health Depart-
 ment (Affil.)Jersey City
 Fleischmann, Mrs. Charles M.....Morristown
 Free Public Library (Affil.)East Orange
 Hoffman, Mr. Fredk. L.....Prudential Ins. Co., Newark
 Howell, Mrs. J. W.....211 Ballantine Parkway, Newark
 Levy, Dr. Julius, Director Division of Child
 Hygiene, Board of Health.....Newark
 McDonald, Dr. John.....190 W. State St., Trenton
 Marvel, Dr. Philip.....1616 Pacific Ave., Atlantic City
 Merck, Mr. George.....Llewellyn Park, West Orange
 Miller, Dr. J. Milton.....127 S. Illinois Ave., Atlantic City
 Moore, Mrs. Paul.....Hollow Hill Farm, Convent
 New Jersey Congress of Mothers (Affil.).....Haddonfield
 Nicholson, Mrs. Wm. H., Jr.....327 S. 2nd St., Millville
 Pierrepont, Mrs. R. S.....Far Hills
 Potts, Miss Amy E., Town & Country Nurs-
 ing ServiceRumson
 Richards, Dr. L. J., Health Officer.....City Hall, Elizabeth
 Roebing, Mrs. Karl G.....211 W. State St., Trenton
 Schloss, Mr. Milton J.....1516 Broadway, Camden
 Spurr, Mrs. Joseph G.....500 Mt. Prospect Ave., Newark
 Stevens, Mr. Richard.....Hoboken
 Tooker, Miss Mary R.....East Orange
 Van Sciver, Miss Jessie F.....Walnut St., Beverly
 Visiting Nurse Assn. (Affil.).....122 Magnolia Ave., Elizabeth
 Warner, Dr. G. Van Voris.....76 E. Front St., Red Bank
 Wittpenn, Mrs. H. O.....125 Kensington Ave., Jersey City

New York

American Nurses' Assn. (Affil.).....419 W. 144th St., New York City
 Arnett, Miss Margaret T., R.N.....390 Madison Ave., Albany
 Babies' Dairy Assn. (Affil.).....8 W. 49th St., New York City
 Babies' Hospital (Affil.).....657 Lexington Ave., New York City
 Babies' Welfare Assn. (Affil.).....Centre & Walker Sts., New York City

Baby Welfare Committee of Utica (Affil.)	Utica
Baker, Miss Charlotte S.	26 W. 55th St., New York City
Baker, Dr. S. Josephine, Director Bureau of Child Hygiene, Department of Health	New York City
Batavia Child Welfare Assn. (Affil.)	6 North St., Batavia
Bayns, Mrs. Howard	830 Park Ave., New York City
Berwind Free Maternity Clinic (Affil.)	125 E. 103rd St., New York City
Biggs, Dr. Herman M., State Commissioner of Health	39 W. 56th St., New York City
Bliss, Mrs. C. N., Jr.	Westbury, Long Island
Brewster, Mr. George S.	51 Wall St., New York City
Brooklyn Children's Aid Society (Affil.)	72 Schermerhorn St., Brooklyn
Brown, Mr. Robert H.	21 W. 127th St., New York City
Buckley, Mrs. Jonathan	600 Park Ave., New York City
Bureau of Health (Affil.)	Rochester
Button, Dr. Lucius L.	265 Alexander St., Rochester
Calvert, Mrs. John B.	Irrington-on-Hudson
Canfield, Mrs. George F.	344 W. 72nd St., New York City
Carle, Mr. Robert W.	153 Water St., New York City
Children's Welfare Division of Bellevue-Hospital Social Service Department (Affil.)	New York City
Coolidge, Dr. Emelyn L.	850 West End Ave., New York City
*Courtney, Rt. Rev. Fredk.	157 E. 81st St., New York City
Crimmins, Mrs. Thomas	176 E. 72nd St., New York City
Crocker, Mrs. E. Masten	169 E. 78th St., New York City
Darlington, Dr. Thomas	27 Washington Sq., New York City
Degener, Mr. John F., Jr.	354 4th Ave., New York City
Delano, Mr. Moreau	59 Wall St., New York City
Dennett, Dr. Roger H.	120 E. 38th St., New York City
Diefenthaler, Mrs. Charles R.	303 W. 91st St., New York City
District Nurse Assn. (Affil.)	131 Franklin St., Buffalo
District Nursing Committee, Brooklyn Bureau of Charities (Affil.)	73 Schermerhorn St., Brooklyn
Downes, Dr. Wm. A.	424 Park Ave., New York City
Draper, Miss Martha L.	125 E. 36th St., New York City
Dunham, Mrs. Edward K.	35 E. 63rd St., New York City
Emerson, Dr. Haven	120 E. 62nd St., New York City
Flagler, Mrs. Harry H.	32 Park Ave., New York City
Folks, Mr. Homer	105 E. 22nd St., New York City
Ford, Dr. C. E.	25 Broad St., New York City
Freeman, Dr. Rowland G.	211 W. 57th St., New York City
Fromczak, Dr. F. E., Health Commissioner	Buffalo
Geer, Mrs. Langdon	301 Lexington Ave., New York City
Geller, Mrs. Fred	Bronxville
Gilder, Mrs. Rodman	898 Madison Ave., New York City
Gillett, Dr. J. R.	179 E. Elmendorf St., Kingston
Gold, Mr. Cornelius B.	45 W. 35th St., New York City
Goodrich, Miss Annie W., Teachers' College, Columbia University	New York City
Grant, Mrs. U. S., 3rd.	998 Fifth Ave., New York City
Haasis, Mrs. Bessie A., Educational Sec'y., Nat. Org. for Public Health Nursing	156 5th Ave., New York City
Hart, Dr. Hastings H., Russell Sage Foundation	130 E. 22nd St., New York City
Hawkins, Dr. Norman L.	Watertown
Haynes, Dr. Royal S.	213 W. 70th St., New York City
Hazard, Mrs. Frederick Rowland	Syracuse
Heiman, Dr. Henry	64 W. 85th St., New York City
Henry Street Settlement (Affil.)	265 Henry St., New York City
Herrman, Dr. Charles	250 W. 88th St., New York City
Hess, Dr. Alfred F.	16 W. 86th St., New York City
Higgins, Mr. Charles M.	101 9th Ave., Brooklyn
Hill, Mr. Nicholas S., Jr.	100 William St., New York City
Hirsh, Mrs. A. B.	71 West 94th St., New York City
Hoe, Mrs. Richard M.	11 E. 71st St., New York City
Holt, Dr. L. Emmett	14 W. 55th St., New York City
Homer, Madame Louise	30 W. 74th St., New York City
Hoopes, Mr. Maurice	Glens Falls
Hornblower, Mrs. G. S.	755 Park Ave., New York City
Hoyt, Mrs. John S.	900 Park Ave., New York City
Infants & Child's Welfare League (Affil.)	31 Division St., Amsterdam
*Jacobi, Dr. Abraham	19 E. 47th St., New York City
"A Jacobi Hospital for Children" (Affil.)	Lexington Ave. & 76th St. N. Y. City
James, Dr. Walter B.	7 E. 70th St., New York City

*Deceased

Johnson, Mrs. Burges	25 Dwight St., Poughkeepsie
Kellogg, Mrs. Morris W.	22 E. 63rd St., New York City
Kerley, Dr. Charles G.	132 W. 81st St., New York City
Kosmak, Dr. George	23 E. 93rd St., New York City
Kridel, Miss Elsie W.	135 Central Pk. West, New York City
La Petra, Dr. L. E.	113 E. 61st St., New York City
Lambert, Mrs. A. V. S.	168 E. 71st St., New York City
Leo-Wolf, Dr. Carl G.	481 Franklin St., Buffalo
Liebmann, Mr. Alfred	525 Park Ave., New York City
Lynch, Mr. Frederick	70 Fifth Ave., New York City
McLane, Mrs. Thomas S.	47 E. 80th St., New York City
McLean, Mrs. Stafford	Southampton, Long Island
Markoe, Dr. James W.	12 W. 50th St., New York City
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Wynkoop, Dr. E. J.	401 James St., Syracuse

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State Department of Health (Affil.).....	Richmond
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Washington

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